re Itliming Imma OMMERCIAL

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

[The MINING JOURNAL as Registered at the General Post Office as a Newspaper, and for Transmission Abroad.]

2136 -Vol. XLVI.

LONDON, SATURDAY, JULY 29, 1876.

JAMES H. CROFTS, STOCK AND SHARE BROKER, No. 1, FINCH LANE, CORNHILL, LONDON, E.C. Established 1842.

ansacted in all descriptions of Mining Stocks and Shares (British Consols, Banks, Bonds (Foreign and Colonial), Railways, Miscel-ance, Assurance, Telegraph, Shipping, Canal, Gas, Water, and

nsurance, Assurance, Accounts, and Shares not having a general marketvalue. so negociated in Stocks and Shares, and in the principal Wagon and runing Companies of the North of England and Scotland. Singlether principal Cotton Spinning Shares.

1. Caoffs, having now established Corresponding Agencies in all the was of the United Kingdom, is prepared to deal in the various Local disares at close market prices.

Accounts opened for the Fortnightly Settlement.

Monthly and Daily Price Lists issued.

ankers: City Bank, London; South Cornwall Bank, St. Austell.

L DEALINGS in the following, or part:—

1 Colliery, £4½. 10 Emma, 15s.

2 annan, 11s. 9d.

2 50 Exchequer.

2 50 Exchequer.

2 51 10 Flagstaff, £1 12s. 6d.

2 52 Fortino, £2½.

2 60; 9d.

2 61, 23s. 6d.

2 61, 23s. 6d.

2 72 Exchequer.

2 10 Flagstaff, £1 12s. 6d.

2 10 Flagstaff, £1 12s. 6d.

3 0 Gt. West Van, 19s.

3 0 Grek.

2 10 Javali, 6s. 6d.

2 10 Javali, 6s. 6d.

2 10 Javali, 6s. 6d. 50 Penstruthal, 16s. 6d. 10 Pennerley, £1 10s. 2 5 Pateley Bridge. 10 Prince of Wales, 6s 9d 50 Plynlimmon, 5s. 10 Richmond. y, £8. nore Coll £2¾. ado, 9d. drai, 23s. 6d. House Colliery, iery, £2½. ales, 7s. 6d. fill Colliery.

10 Richmond.

5 Roman Gravels, £1434

50 Rookhope, 163.

10 Santa Barbara, £1 169.

30 Sweetland Creek, 59.

10 Van Consols, £113.

55 W. Tankerville, £1 159.

10 West Assheton, £1 13

10 W. Chiverton, £17.

10 Wh. Grenville, £1 13

50 West Wye Val., £34.

25 Yorke Peninsula. BPECIAL BUSINESS in POSITIVE ASSURANCE SHARRS. 88 sold for forward delivery (one, two, or three months) on deposit

on hand in all the principal TIN, COPPER, and LEAD Shares. LWAYS .- SPECIAL BUSINESS. Fortnightly accounts ned on receipt of the usual cover.

JAMES H. CROFTS, 1 FINCH LANE, LONDON.

EIGN BONDS - ARGENTINE - EGYPTIAN-RUSSIAN. ISH, SPANISH. SPECIAL BUSINESS, and latest informati JAMES H CROFTS, 1, FINCH LANE, LONDON.

ON SPINNING SHARES.—These steady and remunerative curities (comparatively little known on the London Market, but largely in in the manufacturing districts) can be bought at the present line at y favourable prices to pay good dividends on the capital invested. The Shares (Oldham Mills) are amongst the safest and best of their class:—

Shares (Oldham Mills) are amongst the safest and best of their class:—
sof Mill. Nom. amount Pald up. Last dividend. Closing
of Share. Pald up. Per cent.

18pinning. £ 5 £ 21 0 0 .26 £ 3½ 10 € 4 (cum div.)
ore 5 4 0 0 .30 .5½ to 6

Lane. 50 Fully paid. 40 .77½ to 82½

2 5 2 0 0 .20 .2½ to 3½

5 2 10 0 .25 .2½ to 3

2 1 5 2 10 0 .25 .2½ to 3

2 2 Fully paid. 20 .27½ to 30

2 2 Fully paid. 20 .27½ to 30

or .5 2 10 0 .27 .3½ to 3½ (cum div.) Closing

the accounts of all the above companies are made up quarterly.

W I L L I A M H. B U M P U S, STOCK AND SHARE BROKER, 44, THREADNEEDLE STREET, LONDON, E.C. [Established 1897.]

URCHASES and SALES effected, on the best possible terms, in— SOLS, RAILWAYS, FOREIGN BONDS, and STOCK EXCHANGE THES of every description for INVESTMENT OF SPECULATION.

IAL BUSINESS, at close prices, in the SHARES of all the principal HOME and FOREIGN MINES.

ts opened for the Fortnightly Settlement on receipt of the usual cover.

References given and required when necessary.

A STOCK and SHARE LIST sent FREE on application. BS-The NATIONAL PROVINCIAL BANK OF ENGLAND, E.C.

UMPUS directs particular attention to

MINING INVESTMENTS.

In a position to give reliable information and advice respecting the same.

8aLE, at prices annexed:—
radinant, 12s. 30 Frontino, £2 1's. 3d.
10 Roman Gra., £14½.
25 Flagstaff, 34s.
26 Great W. Van, 17s. 6d.
27 Eut., £2½.
20 Glyn, £3%.
26 Glyn, £3%.
26 Glyn, £3%.
27 Eut., £2½.
28 Flonerley, £36. 6d.
28 Flonerley, £36. 6d.
28 Flonerley, £36. 6d.
29 Flonerley, £36. 6d.
20 Wh. Grenville, £10¾.
30 Wh. Grenville, £28.
30 W. Tankerville, £28.
30 W. Tankerville, £28.
30 W. Tankerville, £28.
32 W. Tankerville, £38.
32 W. Tankerville, £38.
33 W. Tankerville, £38.
34 W. Tankerville, £38.
35 W. Tankerville, £38.
36 W. Tankerville, £38.
37 W. Tankerville, £38.
38 W. Tankerville, £38.
39 W. Tankerville, £38.
30 W. Tankerville, £38.
30 W. Tankerville, £38.
30 W. Tankerville, £38.
30 W. Tankerville, £38.

WILLIAM HENRY BUMPUS, SWORN BROKER

OFFICES: 44, THREADNEEDLE STREET, LONDON, E.C.

IN RISLEY (SWORN), STOCK AND SHARE BROKER, 38, CORNHILL, LONDON, E.C. Established 18 Years.

ences required with new business, or part payment in cash with orders hes transacted at the following rates of commission:—Foreign Stocks, field.; and Mining Shares of £4 each and upwards, 1½ per cent.; under Mountain, Wheal Grenville, Wheal Crebor, and Prince of Wales share

R. GEORGE BUDGE, STOCK AND SHARE DEALER, No.4, ROYAL EXCHANGE BUILDINGS, LONDON, E.C.

PECIAL BUSINESS in -50 East Van, 5 Dolcoath, 95 Penstruthal, 25 West, 30 Chapel House, 5 Wheal Bassset, 105 Prince of Wales, 20 Roman Gravels, 8, 20 Marke Valley, 100 Great Retailack, 10 West Chiverton, 150 Gold Run, EER of 500 Great West Van, 200 Chapel House, 175 New St. Agnes, 300 and.

and, in Comwall Mining Company (Limited).—Special Business in these Mr. Budge is prepared to buy 200 shares in this company, or to sell a number at a small margin.

BRITISH AND FOREIGN (MONTHLY) MINING NEWS. STOCK AND SHARE INVESTMENT NOTES - MINES, MINERALS, and METAL MARKETS-SHARE LIST No. 775, Vol. XV., for JULY, 1876 - Price 6d., single copy; annual

Will be READY on TUESDAY, 1ST AUGUST, which can be had on appli-

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SECURITIES.

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SPECIAL.

The next number of the SPECIAL INVESTMENT CIRCULAR will be published next Tuesday. Post free for One Shilling (issued gratis to clients and correspondents).

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not, application sh by return of post.

M. R. T. E. W. THOMAS, SHARE BROKER, 3, GREAT WINCHESTER STREET BUILDINGS, E.O. Established 1857.

The following are the latest prices at which business could be done. Where the difference between the buying and selling price is wide transactions may be effected at an intermediate price:

Buyers. Sellers.

Buyers. Sellers.

	Buvers, beliers,	buyers, beners
1	Assheton £ 34 £ 1	Pennerley £ 11/ £ 11/
	Birdseye Creek 10s 15s.	Penstruthal 14s 16s.
	Carn Brea	Plynlimmon 4s 6s.
	Chapel House 21/2 21/2	Prince of Wales 5s 6s.
	Devon Great Consols 3 31/2	Richmond 834 9
	Eberhardt 81/2 81/2	Roman Gravels 14 1414
	East Caradon 1 11/4	Rookhope
	East Van 71/4 71/4	Rossa Grande 1s.
	Exchequer Gold 134 134	Santa Barbara 11/2 11/2
	Flagstaff 158 134	San Pedro 1 11/4
	Frontino 21/2 21/2	South Condurrow 31/4 4
	Glenroy 4 5	Sweetland Creek 3s 5s.
	Glyn 334 376	
	Great Laxey 17 171/2	Tincroft 18 185
	Great West Van 17s. 6d 22s. 6d.	Van 85 37
	I. X. L 78 1	Van Consols 11/2 15
	Ladywell 11/2 13/2	
)	Llanrwst 11/2 11/2	
	Marke Valley 11/2 13/4	West Tankerville 11/2 15/2
	North Laxey 128.6d 154.	Wheal Basset 10 12
	New Quebrada 31/4 31/4	Wheal Crebor
	Old Treburgett 4s 5s.	Wheal Grenville 34 13
	Parys Mountain 128. 6d 15s.	Wh. Kitty (St. Agnes) 3 35
	Pateley Bridge 3 31/2	

R. WILLIAM WAR

(LATE WARD AND LITTLE WOOD),
OROSBYHOUSE,
95, BISHOPS GATESTRET WITHIN, B.C.,
STOCK AND SHARE FROKER. M R .

MR. JAMES STOCKER, STOCK AND SHARE BROKER, 2, CROWN COURT, THREADNEEDLE STREET, LONDON, E.C. [Established 1848.]

BUSINESS transacted in all kinds of STOCK EXCHANGE SECURITIES, also in every description of BRITISH and FOREIGN MINING SHARES.

SPECIAL BUSINESS in the following:—
East Van.
Van.
Cathedral.
Grogwinion.
Wye Valley.
West Chiverton.
West Wye Valley.
West Pateley Bridge.
Bilson and Crump.
West Pateley Bridge.
Bilson and Crump.
Public attention is evidently turned to good Mining Enterprises, which afford great profits with small outlay. A large business is being transacted in the following, J. S. having Special Business:

Public attention is evidently turned to good Mining Enterprises, which afford great profits with small outlay. A large business is being transacted in the following, J. S. having Special Business:—

Roman Gravels, Tankerville, Glyn, Pennerley, Rookhope, Wheal Grenville, Penstruthal, Wheal Crebor, Prince of Wales, Richmond, Eberhardt, Frontino, Exchequer, I. X. L., &c.

26 East Van, £1½.

107 Fennerley, 28s.

108 Cokhope, 18s.

109 Rookhope, 18s.

109 Rookhope, 18s.

109 Rookhope, 18s.

109 Robentruthal, 16s.

109 Rob

JAMES STOCKER, SWORN BROKER.

Consols, Foreign Bonds, Railways, Bank, Telegraph, Gas, and all miscellane
Shares bought and sold, and fortnightly accounts opened for same. Shares s
for forward delivery on receipt of cover. List of prices and every information s
warded on application. References given and required when necessary.

BANEER: LONDON AND WESTMINSTER.

C II A R L E S T H O M A S, MINING AGENT, STOCK AND SHARE DEALER, S, GREAT ST. HELEN'S, LONDON, E.C.

MESSES. A. W. THOMAS AND CO, MINING AGENTS, AND STOCK AND SHARE DEALERS.

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ESTABLISHED TEN YEARS.

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No. 30, GREAT ST. HELEN'S, LONDON, E.C., has SPECIAL BUSINESS in St. Patrick, Wheal Kitty, South Condurrow, Wheal Whisper, Pennerley,
South Tolearne, East Lovell, East Van, Pennant, East Caradon, West Craven
Moor, and Bampfylde shares at close prices.

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STOOK AND SHARE DEALERS, 79, CORNHILL, LONDON, E.C.

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C. C. and Co. are prepared to deal, either as Buyers or Sellers, as per annexed quotations:—

Buyers, Sellers, Sellers, Assheton.

£ 24 £ 1½ | Penstruthal 13s, 6d. 15s, 6d. Cathedral (New issue). 27s, 6d. 30s. Roman Gravels.

£ 24 £ 1½ | Penstruthal 13s, 6d. 15s, 6d. 20s. Devon Great Consols 3 3½ Richmond 9½ 9½ 9½ Eberhardt 8½ 3½ South Condurrow 4 4 £ 14 £ 14½ East Van 7½ 7½ Tankerville.

£ 10 10½ Emma 1½ 1½ Vemple 2 2 1½ 1½ Gilyn.

\$ 3½ 4 | Timeroft 18 18½ Great Laxey 16½ 17½ Van 38 £ 32 Van Consols 1½ 2 Van 58 £ 12 Van Consols 1½ 2 Penstruthal 13s. 15s. Vest Chiverton 1½ 1½ 17½ Vest Pateley Bridge 3½ 4 Pennerley 13s. 15s. Vest Chiverton 1½ 1½ 17½ GLYN.—This mine bids fair to rival East Van. The cross-cut at the 28 improves as it nears the lode met with in the 15 fm. level, and there is not the slightest doubt but that a splendid course of ore will be laid open at this level. Shares should be secured at once.

PRENTRUTHAL—The several operations, both in sinking and driving, convinces us that a valuable and profitable copper mine is being opened up. At present low prices shares are a tempting investment.

GREAT WEST VAN.—The recent discovery adds great value to this mine. The shares are \$2 fully paid-up, and selling at 20s. A rise of 100 per cent. may, with confidence, be anticipated.

C. C. and Co. are prepared to deal in any part of 500 shares in each of the above mines as BUYERS or SELLERS at the closest market prices of the day, either for each, account, or time on.

M ESSRS. HARLAND AND CO., STOCK AND SHARE DEALERS, 285 and 286, GRESHAM HOUSE, OLD BROAD STREET, LONDON, E.C. Bankers: London and County Bank

MR. THOMAS THOMPSON, JUN., 1, PALMERSTON BUILDINGS, BISHOPSGATE STREET, LONDON, E.C. Some valuable inits as to the purchase of mining shares will be found in Mr. Thompson's "Investment Circular" for July now ready, post free, price 6d.

MESSRS. A. ENDEAN, FISHER, AND CO., STOCK AND SHARE DEALERS, 3, LOMBARD COURT, LOMBARD STREET, E.C.
Bankers: London and Westminster, Lothbury.

MESSRS. J. TAYLOR AND CO., 86, LONDON WALL, LONDON, E.C., MINING ENGINEERS AND INSPECTORS, STOCK AND SHAREDEALERS. Have business in the following at close rates:—East Van, Glyn, Llaurinsiadr, Marke Valley, North Prince Patrick, Penstruthal, Pennerley, Prince of Wales, Roman Gravels, Rockhope, South Condurrow, Tankerville, Van, Van Consols, West Tankerville, Wheal Grenville.

Argentine, Condes, Eberhardt, Richmond.

OFFERS WANTED FOR—200 South Roman Gravels, 100 Great West Van, 100 Cathedral, 50 Ladywell.

E. S I M P S O N, STOCK AND SHARE DEALER.

6. GREAT WINCHESTER STREET BUILDINGS, LONDON, E.C., will

8. ELL the FOLLOWING SHARES, free of commission:—
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100 Birdseye, 12s. 6d.,
100 Aberdaunant, 11s.,
100 Rossa Grande, 1s. 3d.,
101 Rossa Grande, 1s. 3d.,
101 Rossa Grande, 1s. 3d.,
102 Rossa Grande, 1s. 3d.,
103 Rossa Grande, 1s. 3d.,
104 Rossa Grande, 1s. 3d.,
105 Rosshope, 14s. 9d.,
106 Rossa Grande, 1s. 3d.,
107 Rossa Grande, 1s. 3d.,
108 Rossa Grande, 1s. 3d.,
108 Rossa Grande, 1s. 3d.,
109 Rossa Grande, 1

I L I A M B. C O B B, 62, CORNHILL, LONDON, E.C.

Business transacted in every description of British and Foreign Stocks, Mining

Business transacted in every description of British and Foreign Stocks, Mining Shares, Ac.

Mr. C. is now recommending the Purchase of Shares in several companies for bona fide investment, some of which are paying 10 to 20 per cent. dividends, and likely to have art important rise. Full particulars on application.

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HEAR from BROKERS or DEALERS who have ANY FOR SALE.

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100 CHAPEL HOUSE COLLIERY SHARES, at £2 10s.
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84 Lithographic Plates.

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Royal School of Mines.

PROF. SMYTH'S LECTURES ON MINING-No. XXXVIII. [BY OUR SPECIAL REPORTER.]

It is under the favourable circumstances of almost horizontal condition that the very extensive workings in the northern counties are carried out, from which, so far, our examples have chiefly been drawn. It is there that we can most advantageously study this system of working on a large scale, where the workings are carried out in every direction from the shaft. In this respect they differ out in every direction from the shaft. In this respect they differ much from the workings in other districts, where the levels pass both ways, and the workings [extend to the rise, leaving the lower portion to be worked in another lift, by means of pits put down deeper, or by means of an inclined plane. It is a very usual thing to seek for a central place where to put down the most important plant, but it will depend upon the demand for the mineral, and on other circumstances, as to whether the whole of the mineral is to be got alone or in successive lifts or slices.

In Fig. 32 the portion to the rise, B C', will be worked by means



of the shaft, A B; but then will come the question how the portion below B is to be got. Under some circumstances it may be advisable to sink other shafts, while in some cases this cannot be done, as, for instance, when this portion is under the sea. Another method is to put down an inclined plane, or pair of inclined planes, for the shaft, A B, and so work that portion to the dip: while a still further plan is open, which he sun out infrequently been adopted—to sink the real shaft, A B, and so work that portion to the dip: while a still further plan is open, which he sun to unfrequently been adopted—to sink the main shaft covers and the country of the still further plan is open, which he sun to unfrequently been adopted—to sink the rise again. In this latter method the mineral ast it is obtained which is the still further than the cover of the same point, C, and from this point to work to the rise again. In this latter method the mineral ast is to obtained will a system. The regularity of the workings the plant or long will be a mean of erra cox, whether workings the plant or long will be a mean of erra cox, whether working by the plant or long will be a mean of erra cox, whether workings the plant or long will be a mean of erra cox, whether working by the plant or long will be a mean of erra cox, whether working by the plant or long will be a mean of erra cox, whether working by the plant or long will be a mean of erra cox, whether working by the plant or long will be a mean of erra cox, whether working by the plant or long will be a mean of erra cox, whether working by the plant or long will be a mean of erra cox, whether working by the plant or long will be a mean of erra cox, whether working by the plant or long will be a mean of erra cox, whether working by the plant or long will be a mean of erra cox in the long will be a mean of erra cox in the long will be a mean of erra cox in the long will be a mean of erra cox in the long will be a mean of erra cox in the long will be a mean of erra cox in the long so as to be rendered quite valueless. Again, if there be areas subject to the presence of water to any great extent—that is to say, permeable strata—unless the workings are so arranged as not to break away this ground into the goaves there is a very serious risk; on and after spending large sums in expensive tubbing, this may be the means of letting in the water which it has taken such pains to exclude. In shallow ground the formation of this goaf extends to the surface, but in the deeper mines there is satisfactory evidences so much larger that, unless new conditions have packed it more closely, you may take away the pillars over many acres, and yet the ground hold itself together so as not to show at the surface. Workings have been, and are now, opened where the pillars have been taken away under a tidal river, or even under the sea. There is another fact which needs to be constantly borne in mind; if you have your colliery extend over a large area there is a great temptation to begin some of this pillar working near the shaft bottom, but it is obvious that with the open lights which are generally in such close proximity these goaves, subject to containing in such close proximity these goaves, subject to containing in

them large quantities of fire-damp. Of course, the goaves must be kept under strict supervision, the ventilation must be carefully regulated, and strict precautions taken that no one goes near them with open lights. Where there are large areas to deal with this

be kept under strict supervision, the ventilation must be carefully regulated, and strict precautions taken that no one goes near them with open lights. Where there are large areas to deal with this cannot be avoided to a great extent; all you can do then is to leave these masses of coal as barriers, and to cause the ventilation to set in such direction that after having once passed by these goaves it should not again come in contact with naked lights.

A few modifications of this pillar and bord system may be found in Lancashire and North Staffordshire; and in these districts we shall generally find that the roof is not so good as in the North of England, and the angle of inclination is apt to be more considerable. These cannot be seen more than in the coal field of the Potteries, which contains the greatest thickness of coal in England, and which until lately has not had justice done to it. Where the seams dip at a considerable angle, it has usually been the case to sink vertical shafts, and then to intersect the seam by means of cross-cuts: each one of these cross-cuts on reaching the seam has levels or drifts to pened for it, a lower one for drainage and haulage, and an upper one for an airway. This pair of levels has generally a pillar of 10 to 15 yards between, holed through at intervals during the working, but afterwards stopped up. Owing to the great inclination of the seam it would be difficult to work these bords upwards, and it is usual, therefore, that dips, or inclined planes, are driven from one pair of these main levels to another (a distance of 60 to 120 yards). The tract of coal included between these "jig-brows" is then subdivided into pillars, of much the same length but narrower than those of the North Country, inasmuch as they have not to stand so long. When the coal has thus been broken up to the boundary, or the old working, the getting of the pillars is commenced in diagonal lines. The pillars are cut in slices, and the men are protected, as before, by abundant props and by walling. Anot

and the question as to the best method of working a given, one which will exercise to a great extent the experience asment of the manager.

THE FRUE VANNING MACHINE,

NOTES ON SOME RESULTS OF THE LATE TRIAL OF THE MACHINE AT THE WEST SETON MINE, CORNWALL,

MACHINE AT THE The following assays will give some idea of the separation effected The following assays will give the following assays will give the following on different qualities of material from the tin-flow when working on directory who may not be personally acquired but, for the benefit of those who may not be personally acquired

thrown off.

III.—Mixture of slimes from the slime-pits and of rough and caught just below the strips. Treated at the rate of 61 tons in in 24 hours.

24 hours.

Assays.—Feed, equal to... 31 lbs. t

Witts, or headings, equal to... 291 lbs.

(1)—Tailings, equal to 31bs.
(2)— ,, worthless.

(1)—Animage, equal to the stamps, and the stamps. This mixtus senting the material flowing direct from the stamps. This mixtus was made up by taking portions of the heads, middles, and tails of the strips just under the stamps, and mixing with about half in weight of fine slimes from the slime-pits. The material was treated at the rate of 6 tons (dry) in 24 hours, and this rate of treating was limited by the arrangements for feeding by hand, not by the cap-

tamps. ... 39 lbs. t ... 224 lbs. ... 31bs.

tailings finally lost contain about 6 lbs, black tin to the ton. Sufficient has been said in regard to the separation performed by the Vanning machine; indeed, among the great number of practical men who have seen the machine at work, there has been but on opinion on the subject. It now remains to say a little as to the conformation of erection and working of such machinery.

At the present time tim dressing in Cornwall is carried on by a series of processes that may be more aptly termed hand labour that machine work; the bulk of the material dressed is fed into buildies by hand, then dug out of the same to be re-fed into other buildies, until sufficiently clean for roasting. The principle upon which both buildles and strips work is the same; the current of water earlying the crushed material flows down an inclined plane, deposing its heavier particles in the order of their weight, the tin and having minerals remain in the upper portions of the buildles or strips, and while the lighter rock is carried further on. After working a time either a buddle or a strip becomes full, and work must the be stopped until the material fed in is lifted out again in either two is these cleans of working a light of the consensation. stopped until the material led in is litted out again in three classes of varying richness. For the hand labour necessitate by these repeated re-workings Cornwall is fortunate in being able to employ small boys and girls at a few pence each per day, at thus, though the methods of dressing are crude, cumbersoms and imperfect in results, and despite the great number of persons employed, the actual cost of preparing the tin is not high. The little power required to drive the small brushes which sweep around its power required to drive the small brushes which sweep around its power in the state of the small brushes which sweep around its power required to drive the small brushes which sweep around its power buddles is almost universally supplied by water-wheels to various buddles is almost universally supplied by water-wheels in that no cost exists other than mere labour cost. Under these discussions it is not very surprising that any improvements in the chinery make but slow progress in Cornwall. Tin dressers, but the control of the c enthery make but slow progress in Cornwall. Tin dresses, lowever, have no objection to admitting that the desidentian is a method of dressing up clean at one operation, for the fact cand be denied that a certain and very appreciable loss of tin occurs at each re-handling of the material in water. These points are used to the process in comparison with the old it is necessary to take its new process in comparison with the old it is necessary to take its consideration not only the actual cost of dressing per too fools. consideration not only the actual cost of dressing per ton of rock

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of materials of the state of th ding wheth operation, spendent or expedience old in any rounds; in

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so the relative loss of tin involved. Tin is undoubtedly a ball so the relative loss of tin involved. Tin is undoubtedly a ball so the relative loss of tin involved. The precious metals, but them at the present low price every pound of black tin is worth even 4d, and 5d, and the saving of 2 or 3 lbs, of tin on every ton leave 4d, and 5d, and the saving of 2 or 3 lbs, of tin on every ton leave 4d, and 5d, and the saving on the statements just made Andring the Cornish method of tin dressing, is the impossibility of 18 painting in improved machinery as an auxiliary to the old plant; it putting in improved machinery as an auxiliary to the old plant; it putting in improved machinery as an auxiliary to the old plant; it is used to the control of the work in the control of the

increase in quantity worked. The space at present at command will not allow here of a detailed statement of the 'cost of a change in machinery, but on another occasion we hope to be permitted to ster minutely into the matter.

A general comparison of results can be given however, taking for example the case of the West Seton Mine. The present cost per month for dressing at the mine above mentioned is 78L, giving employment to 70 hands. The cost of running a 40-ton mill properly constructed, allowing for a day and a night force, two overseers, oil for machinery, and a liberal percentage of capital invested for wear and tear, would be 66L. Of course coal is included in this, and the number of hands employed would not exceed 15. At West Seton they do not average 40 tons per day. The saving in cost is here only 12, per month, but it can be safely taken that 3 lbs. of tin will be extracted from the ton of rock in addition to that at present savel. Such a saving would be equivalent to at least 52L per month, making total saving of 64L. Taking cost of complete new mill with eggine and boiler at 1200L, a liberal estimate, the above saving would be equivalent to a return of 64 per cent. per annum. The above estimate includes the dressing of the roasted "witts." In increasing the capacity of the mill the increase in cost will not be in direct proportion, while the cost of treatment per ton of rock appreciably diminishes.

Deleoath, which treats some 200 tons of stuff per day, would doubtless require a large mill and a great number of dressing ma-

appreciably diminishes.
Delegath, which treats some 200 tons of stuff per day, would doubtless require a large mill and a great number of dressing machines; but the floors already in use have cost, if report be true, ten times as much as a single mill would require for erection, and the aving in working by machinery so large a quantity of rock would be very great, as we hope soon to be allowed space to prove by flurge.

In many of the Cornish mines a vanning machine could be cheaply In many of the Cornish mines a vanning machine could be cheaply erected to run by a water-wheel, and dress up with the help of a few lads, all the roasted "witts" from the ovens, saving not only in cost of dressing and extra tin extracted, but indirectly by doing away in many cases with the necessisy for re-stamping and reworking the "burnt leavings"—an operation delaying the other work and not productive of much profit anyway. At the West Seton Mine, where about 7 tons of "witts" are roasted per day, it is calcalted that a saving by the use of machines would be effected of 90, per month if run by water-wheel, or 20, if run by a small engine; and in addition, the ugly pile of "burnt leavings" for subsequent stamping would be done away with.

ONTHE COAL TRADE AND STRIKES,—Sir Edward Watkin, M.P., presided at the Manchester, Sheffield, and Lincolnshire Railway half-yearly meeting, at Manchester, and, in referring to the affairs of the company, said there had been a decrease in the traffic of the half-year of 33,000L, and there had been a decrease of 16,500L in the of the company, said there had been a decrease in the traffic of the half-year of 33,000L, and there had been a decrease of 16,500L in the Aspenso. After explaining various items of income and expenditure he referred to the South Yorkshire strike. He said the half-year had been disfigured by a strike of eleven weeks in the South 1 Torkshire oad district, by which he estimated that the company had lot, directly and indirectly, traffic amounting in value to 55,000. He estimated that the referred to the South 1 Torkshire oad district, by which he estimated that the company had lot, directly and indirectly, traffic amounting in value to 55,000. He estimated that the railway company 50,000L, as he had stated. Yet there were people used that, notwithstanding protection in America, and trades nilosism in England, the commercial interests of this country were safe, and night be protected. Two or three years ago, when coal had reached a very high price had off that high prices would bring about low prices as certainly as one ciseration begin the traffic of the commercial interests of this country were safe, and sight be protected. The first had been such that in 1859 the price at the pit mouth was 85, per ton, and the vages per ton was 12s., and wages per ton 4s. 25d.; and in 1873 the price per ton was 12s., and the wages 9s. 55d. The price had now district the miner was now producing less for more money. Whereas, in 1875-59 the miner was now producing less for more money. Whereas, in 185-59 the miner was now producing less for more money. Whereas, in 185-59 the miner was now producing less for more money. Whereas, in 185-59 the miner was now producing less for more money. Whereas, in 185-59 the miner was now producing less for more money. Whereas, in 185-59 the miner was now producing less for more money. Whereas, in 185-59 the miner was now producing less for more money. Whereas, in 185-59 the miner was now producing less for more more. Whereas, in 185-59 the miner was now producing less for more more working only eig

in England, the result is of so much more leisure time given to working men was so much more extravagance and dissipation. With respect to the reduction of fares, introduced by the Midland, he said that he was in possession of figures which would show that the policy had been disastrous to the Midland Company itself, as well as to other railway companies. He did not believe he was wrong in saying that the Midland Company had by their policy abstracted from the pockets of railway shareholders generally 300,000. a year, and it would have been much better for them to have given Mr. Allport 1,000,000. to buy himself an estate than to have permitted him to carry out the policy he had done. With respect to the state of trade generally, he regretted to hear that by the suspension of payments on Turkish and Egyptian Loans residents in London alone had received 6,000,000. less this year than last, and consequently so much less was being spent; and he had it on the authority of Mr. Mundella that the diminution of wages paid in this country was nearly 2,000,000. a week. It was not surprising, therefore, that the traffic should show a large decrease. He was hopeful, however, that after passing through another year of wholesome discipline England would be able, by reducing the inflation of wages and by doing more work, to outbid all other producers in the world in cheapness; and then we should resume our trade with all markets in the world, for no amount of protection could stand against cheap production.

GOLD IN FRENCH GUIANA.

In reporting from Cayenne on the trade and commerce of French Guiana, Her Majesty's Consul tells us that the gold industry has flourished during the year 1875, and that the average yield per month has been 9427 ozs. One gold mine at Sinnamary lately produced a nugget, amongst its other riches, weighing 900 grammes, or nearly 2 lbs. New discoveries of gold have been made at Iraccubo, where hitherto the soil has been unfruitful. The concessions of land for gold prospecting continued to increase during the year, and grants over an extent of 1,111,000 hectares were made during the first six months. Finds also and concessions have been made at Mana and Maroni, but many grants have been abandoned for various reasons. It is, therefore, not to be supposed that gold is to be obtained without very severe labour and trouble. M. Paul Cés, who has published several articles on the French colonies, and among them one on French Guiana as a gold-producing country, predicts for it the position not of one of the first of their colonies, but of the first. According to an unpublished mémoire, quoted by Mr. Consul Wooldridge, which contains instructions to a gold company just commencing operations, the greatest part of the metal, it is believed, is to be found in the beds of the rivers and creeks, and this opinion is founded on two reasonable suppositions—1. French Guiana is traversed from south to north by immense rivers, whose currents, very strong during the rainy season, cease to flow with any rapidity during the dry seasons. On each side of these rivers flow creeks, whose sources, like those of the principal rivers, are situated in the Tumac Oumack Mountains, which separate the three Guianas from Brazil. It is already known, continues the author of the mémoire, that these mountains are the origin of all the gold mines found in Brazil (?); and the geological conformation of French Guiana being identical with that of Brazil, it is logical to conclude that the gold spread over French Guiana also comes from GOLD IN FRENCH GUIANA.

THE COAL FIELDS OF ALABAMA.

THE COAL FIELDS OF ALABAMA.

A just-published consular report from Mobile contains some interesting information on this subject, from which we condense the following particulars. For some time past considerable attention has been attracted to the project for opening the Coosa river to navigation, in order to secure an outlet for the coal and iron of Alabama through the port of Mobile, and Her Majesty's Consul reports that great confidence is felt in the ability of the people to accomplish the work; it is believed, indeed, that every effort will be made during the current year to prosecute this most important undertaking. The Coosa coal fields, extending across and cropping out from the banks of the Coosa river, cover thousands of square miles. The deposits are immeasurable, and are of the very best quality; they lie immediately at or near the surface, convenient for mining and shipping. The beds begin near the celebrated Montevallo Mines, 75 miles from Wetumpka, and extend under different names with rare intermission along the entire line of the river into the mountains of Georgia and along the banks of the Tennessee. The quantity which can be easily mined is sufficient to supply the demand of the entire world for ages to come. Although the production of coal in Alabama is as yet very limited, and the first cost higher than it need be from want of competition in the market, it is shown by the United States Census Report of 1870, taken at a time when labour was greatly demoralised and uncertain in that part of the Union, that the average cost of coal at the colliery was less in Alabama than in Virginia, Tennessee, Missouri, Iowa, Kansas, Michigan, Rhode Island, Kentucky, or in any or the Western territories. Want of labour, want of economy in the organisation of the mines, high prices of coal at the local markets, and want of capital appear to have all combined thus far against the Alabama mines, but, not withstanding all these difficulties and drawbacks, the cost of coal at the collieries can even now compete i A just-published consular report from Mobile contains some inat the collieries can even now compete in cheapness with that of

At Mobile it is now 24s., but with improved rivers the greatest cost

The bituminous coal exported from the United States in 1873 was 1.086,253 tons. To the countries which lie convenient to the Gulf of Mexico, the exports were:—

Ouba Danish West Indies 13,757 ... 2,443 ... 6,363

Great Britain supplies Brazil annually with 350,000 tons of coal every ton of which could be furnished by Georgia, Alabama, and Tennessee in exchange for coffee and other tropical products. With the Coosa River opened to Montgomery and the Alabama to Mobile, the latter place could ship cheaper and better coal than Philadelphia, Baltimore, or Nova Scotia. Including only New Orleans, which consumed last year 375,000 tons, the coast towns, the Gulf shipping, the West Indies, Mexico, and Brazil, there would be a demand on the Alabama and Tennessee mines of 1,000,000 tons of coal per annum, an amount which would distribute one million sterling among the people of that section of the country from which Her Majesty's Consul writes. Besides the coal consumed at Mobile and shipped abroad and coastwise, it must be borne in mind that vast quantities would be consumed inland whenever the price of coal is put below the cost of other fuel. The towns, villages, forges, factories, and furnaces which line the waterway will all add to the demand. What this demand will be within a very short time after the opening of

the Coosa route may be guessed at when it is known that the tonnage of coal from the Pennsylvania mines amounted for the year preceding September, 1875, to over 16,000,000 tons.

Her Majesty's Consul concludes his remarks by giving some estimates of the probable cost of Alabama coal laid down at various places, and the amounts of coal conveyed last year by certain canal companies and railroads. All his vaticinations respecting the future of the Alabama coal fields are, however, dependent for their realisation on the Coosa river being put in a navigable condition, or on the removal of the necessary obstructions, and that work, it is believed, will cost close upon 600,000%.

MINING AND METALLURGY AT THE AMERICAN INTERNATIONAL EXHIBITION-No. III.*

MINING AND METALLURGY AT THE AMERICAN

INTERNATIONAL EXHIBITION—No. III.*

The mining and metallurgical display of Great Britain (of which future mention will be made) is far below that of her dependencies—that of the British colonies in North America and the great Island Continent of Australia being remarkably comprehensive. The Australasian colonies, with an eye to business, have each set forth their advantages in the most attractive form, and present all possible encouragement to emigration by the exhibition of mining, agricultural, and pastoral statistics, prices of provisions, wages of mechanics, &c. The continent of Australia, closely approximating in area the United States, is at present divided into the five provinces of Queensland, New South Wales, Victoria, South Australia, and Western Australia; all of which (except the latter) are well represented at the Exposition. All of it is new country, New South Wales, which has an average breadth of 500 miles, and an average length of 650 miles. The present population numbers about 500,000. The New South Wales Court has two prominent trophies; the first is a model of a parallelopipedon, covered with gold foil, to represent the output of the gold mines in the colony from 1851 to 1874. The quantity represented is over 8,000,000 ozs., and the product is valued at about \$155,000,000. Around the base of the model are piles of copper ingots, pile tin, but rin, and a case of grain tin. There are also photographs of some of the remarkable specimens removed from the diggings. One of these illustrates a specimen 4ft. 9 in. high, 2 ft. 2 in. wide, and averaging 4 in. in thickness, containing an immense quantity of gold; the weight was 630 lbs. and the value \$60,000. Another photograph displays \$310,000 worth of retorted gold, the result of one crushing.

There is quite an elaborate display of specimens characteristic of the gold deposits which, according to the mineral maps exhibited, seem to be tolerably well distributed throughout the colony. The second trophy is comp

power. The output of kerosene shale is somewhat over 100,000 tons, and the average price in the past 10 years is equivalent to about \$13 gold per ton.

Queensland is not behind her neighbour in the South in setting forth the advantages of the colony to those in search of an Eldorado, and in the centre of its court a gilded obelisk over 20 ft. high stands to represent the gold exported from 1865 to 1875, amounting to over 55 tons, and valued at \$35,000,000. The display of gold ores is less comprehensive than that of the New South Wales court; but the individual specimens are superior, especially for cabinet use. Around the walls of the court are hung coloured photographs exhibiting the peculiarities of the colony, and among these area number illustrating the mining industries. The walls are also adorned with a complete ollection of geological charts, mining statistics, &c.; the geological is also exemplified by specimens of rocks. Some gold nuggets and auriferous quartz represent the mining of this precious metal, which is claimed to be; on the increase only in Queensland. The copper weighing nearly 900 lbs. stands besides a boulder of malachite, rivaling this boasted product of Russia; there are also carbonates and sulphurets of copper, and several tons of ingots exhibited.

In connection with a like quantity of tin ingots, there is a complete collection of the tin ores from the Stanthorpe district, the principal deposit of these ores lying near the boundary of New South Wales. Stream tin, wash-dirt, &c., are on exhibition. Cinnabar, antimony ore and regulus, native bismuth, carbonate of bismuth, and ore containing 77 per cent. of percxide of manganese are displayed.

The iron ore displayed is small, consisting of hematites and chrome

and ore containing 77 per cent. or percause of manganess.

The iron ore displayed is small consisting of hematites and chrome irons. There are a number of samples of coal and coke produced from it on exhibition. The elegant collection of opals, chalcedonies, and agates attest to the richness of the colony. The Government, with true progressive spirit, has prepared an exhaustive display, and sent out special agents to investigate industries and processes, and purchase for the colony the most approved machines and appliances. As we stood in the Queensland court and took a survey of the resources exhibited, we could not but wonder what its future development will be when the 180,000 people who now inhabit this colony, nearly three times the area of Texas, shall have habit this colony, nearly three times the area of Texas, shall have given place to the millions who may unearth many yet hidden treasures. Victoria, which in 1851 was made a separate colony out of the southern section of New South Wales, boasts of being the least in area and the greatest in population of any of the Australasian colonies. No model of gold export decorates her court, but over the doorway is hung a statement exhibiting the gold output of each of the colonies of Great Britain in the South Seas, which foots up to \$255,00,000, below this total is plead the gold haveletting of Victoria and victoria \$345,00,000; below this total is placed the gold production of Victoria, \$375,500,000 — a truly wonderful amount, and yet, adding the output of Victoria to that of the other colonies, the amount is but

output of Victoria to that of the other colonies, the amount is but 90 per cent, of the gold produced in America since the forties.

A case containing fac-similes of remarkable gold nuggets give an indorsement to the figures above quoted, and form the prominent features of Victoria's display of mining and metallurgy. The Government gives great prominence to the exhibit of truly remarkable cereals and agricultural products. There are, however, specimens of auriferous rocks and quartz, nickel, antimony, and lead ores, and samples of various metals smelted in the colony. A rather crude model of a safety mining carriage forms a part of the exhibit.

The facsimiles of gold nuggets are sufficient to encourage a stampede to Melbourne, and encourage dreams of fortunes made in a day innumerable. Among them may be named the "Welcome" nugget, weighing nearly 2200 ozs.; the "Viscount Canterbury," over 1100 ozs.; and the "Viscountes Canterbury," over 855 ozs. Although but few wonderful specimens have been brought to light in late years, there is no reason to imagine that the diggings are worked out of a country as great in area as England, Scotland, and Wales, inhabited by fewer people than reside in Philadelphia. However, the gold fever is over at Melbourne, and now emigration is invited by the encouragements offered by the surer and safer industries of grain and stock raising.

— Iron Age (New York).

Mining Tools at the Philadelphia Exhibition.—The Hardy Patent Pick Company, of Sheffield, England, exhibits a very fine collection of picks and handles in the English Department of Machinery Hall. These picks, curiously enough, were invented in 1869 by C. A. Hardy, of Philadelphia. Their manufacture on a commercial scale has, however, only been carried on in England, and after five or six years of successful working there they are now brought back here to serve as a proof that England is not always conservative in adopting a good foreign invention, even though it may not have been appreciated at home. The original invention of Mr. Hardy consisted in the fitting of a malleable iron socket piece to the feather of the handle in which the pick was fastened by a set screw, it being made solid without an eye. The pick as now made fits in a similar malleable iron socket, but instead to being held in place by a set screw, it is secured by a steel wedge and cotter which bears up against the under side of the pick. The pick is slotted on the upper side, and is pressed up by the wedge, so that it is firmly held by the top of the socket. This form of handle is much used with light straight mining picks, and it is said to work well. When it is necessary to frequently sharpen the picks this form is specially valuable, both on account of the readiness with which they are removeable, and also because the cost of making these heads is less than with those having "eyes." Another form of pick made by the Hardy Company has a long iron ferrule on the feather of the handle, which is split on both sides for some distance from the top. When the pick is criven on in the ordinary manner the ferrule contracts at the slit slightly, its elasticity helping materially to keep the plck firmly fixed in its place. A third form of handle is made with a solid ferrule, is timyly held on this study of ferrule, is diffinity held on this country, and also special kinds of handles. Where it is necessary that the latter should be quite short, they are MINING TOOLS AT THE PHILADELPHIA EXHIBITION.—The Hardy

THE CLEVELAND IRON TRADE.

THE CLEVELAND IRON TRADE.

The publication of the Ironmasters' Statistics for the Cleveland District for June enables a more accurate view of the present position and future prospects of the Cleveland into natade to be taken, and it must be confessed that they reveal also the depth of the depression which the whole trade feels. The facts are apparent that the state of trade has forced a reduction in the make of pigiron in Cleveland district, and in spite of the reduction and of the enlarged amount sent out of the district, there is an increased quantity accurate that the state of rigiron held by makers in the Cleveland district have doubled, and they now amount to the largest quantity so held in these boundaries of recent years—183,712 tons, aithough the make mouthly has false from its maximum—attained in the state of the sta

THE FATAL COLLIERY EXPLOSION AT CWMCARN.—About 15 months ago the Ebbw Vale Company commenced sinking a pit at Cwmcarn, at the foot of the Mynyddmaen Mountain. The shaft has been sunk to a depth of 152 yards. There are three shifts employed at the pit, each consisting of a "leader" and nine sinkers. The shifts change every eight hours, and the set that was working had gone down at 2 o'clock, P.M. At 6 o'clock, after firing a shot, they came up to "bread," or what would be their principal meal, for which half-an-hour is allowed. After the meal the leader of the set, Hy. Atkins (Riscu), and three sincers, Thos. Jones (Risca), Wm. Williams (Cwmcrm), and Thos. Davies, better known as "Tom Penrhiwbica," (Abercann), proceeded down the pit. Soon after disapparance a tremendous shock was (elt by those on the surface, and the covering of the pit was turned completely over, burying a man, named Jumes Roberts who, however, was rescued computatively unhurt. A top man name! Charles O'llstrown an epitew of the ganger, was blown about seven yard, he, too, escaping without injury. A man, named William Hopper, was struck on the side of the head by some of the falling debris, and others were cut on the arms and face. Desire yard was heafter. Wind up for God's sake," and this was done without delay. To Penthiwbica was drawn up with Mr. Williams in his arms, but the latter died in a few minutes, repeatedly calling for water. Help soon arrived, and water was pumped down, and a steam main also erected for the purpose of sucking up the tallphuric air; but it was fully two and a quarter hours before an attempt to de-THE FATAL COLLIERY EXPLOSION AT CWMCARN.-About 15

scend could be made, and this was done by Mr. D. Evans, surveyor to the company J. Marsh, an overman, and Henry Penrhiwbica (brother to Tom). After going very slowly down some distance, a call was made "wind up," and it was manifest that the pit was full of gas from the explosion. Attempts were made about every half-hour to descend, but it was found impossible to penetrate below with lights, Mr. Pond, the manager of the company at Abervarne, Mr. J. T. Green, nanager of the company at Abervarne, Mr. J. T. Green, nanager of the company at Abervarne, Mr. J. T. Green, nanager of the company at Abervarne Company is pits, and Mr. Howell, who has the contract for sinking at Risca, went down without lamps, and eventually succeeded in finding one of the bodies, which they immediately brought to bank. Descending again they brought up another body. The deceased men leave wives but no children. They were frightfully burnt, and one of them had the upper part of his face blown away. Dr. Davies was soon on the spot, as were also Mrs. Green and Mrs. Pond, but no assistance could be rendered,—South Wales Daily News.

THE IRON INDUSTRIES OF WILTSHIRE.

By RICHARD MEADE, Assistant Keeper of Mining Records, Museum of Practical Geology.

Museum of Practical Geology.

Manufacture of Pig-Iron.—In a previous notice attention was directed to the ironstone deposits of Wiltshire, occurring and worked in the neighbourhood of Westbury, in the coral rag; at Seend, near Devizes, in the beds of the lower green sand; and of other deposits in the counties of Oxford, in the marlstone or middle lias; in Hants, in the Bagshot beds; in the Isle of Wight, on the shore between Yarmouth and Hempstead ledge; and in Buckingham, at Leighton Buzzard and Linslade, in the lower green sand; details of production and analyses of these brown iron ores followed. It is now proposed to trace the manufacture of pig-iron in Wiltshire and in Hampshire. In the year 1857 the Messrs. Greenwell and Co. commenced operations by the construction of the ironworks at Westbury, conveniently situated to the railway station of the same name. In the following year the first furnace was put in blast; the yield for the year 1858 is not separately distinguished, being included in the production of the Pennywell Road furnaces, of the Messrs. Langford and Co., of the adjoining county of Somerset, which amounted to 2040 tons of pig-iron. In the following year the works at Seend were laid down by the Messrs. Sarl and Sons, who commenced the erection of two furnaces. Theiron ore raised at this period from the mines in Great Britain and the production of pig-iron, the yield of 125 blast-furnaces then in operation, will be seen in the following abstract—for 1859: Iron ore.

District.

Mines. Tons. Furnaces in blast. Tons.

District.		TLOH O		rig-trou.				
	Mines		Tons.	Furnaces in blast. Tons				
Cornwall	. 28	********	35,213	*******	-	******	-	
Devonshire	. 5	********	3,598	*******	-	********	-	
Somersetshire	. 6	********	29,084	******	1		5,000	
Gloucestershire	. 11		106,292	*******	6	*******	31,750	
Wiltshire	. 3	****** **	28,993	********	2	** ******	5,5:0	
Hampshire		*******	9,725	*******	-	*******	_	
Northamptonshire	. 7		130,059	*******	3	*******	12,800	
Warwickshire		********	30,500	*******	-		-	
Oxfordshire	3		6,030	*******	-	*******	-	
Lincolnshire	. 1		2,000	*******	_	********	-	
North Staffordshire			624,000			1/2	143,500	
South Staffordshire			825,000			2	473,300	
Shropshire			197,589	********	30		149,480	
Derbyshire			325,500		27	*******	139,250	
Yorkshire, West Ridin		*******	175,000	*******	24		84,950	
ditto North Ridin		********	1,520,343	*******	23		216,127	
Northumberland	1		13,320		6		31,500	
Durham		*******			46	*******	370,039	
Cumberland	21	********	403,177	********	7			
Lancashire	. 23	********	445,046	*******	7		26,491	
North Wales	. 5	*******	87,072		- 6	*******	26,980	
South Wales	-		619,758	*******	147		985,290	
Ireland	. 1		3,000		-		-	
Isle of Man	. 1	********	1,283	*******	1000			
Scotland		******	-	*******	125	******	960,550	
Totals			7,876,581		607	3	,712,904	

In comparing the above returns of ore raised and pig-iron produced the quantities represent the individual produce of each district. The pig-iron taken in any district must not be taken to represent the pug-ron taken in any district must not be taken to represent the yield of the ore of the same district, from the fact that many of our ironworks—as, for example, those of Durham—are mainly supplied with ironstone from the Cleveland district, and imported ores from other districts and foreign countries. Again, South Staffordshire, in addition to her own important argillaceous ores, receives considerable supplies from Northamptonshire and other sources, the yield of which is included in the district into which the ore is thus imported and smelted.

which is included in the district into which the ore is thus imported and smelted.

The average market prices of pig-iron "mixed numbers" at the period above referred to (1859) were as follows per ton:—Welsh pig. 33. 15s.; Scotch pig. 23. 12s.; Cleveland pig. 24. 13s. 3d.; and Staffordshire pig. 34. 15s. 9d.

Resuming with the year 1860, we find the Seend Works first in operation, those of Westbury were also active, and the recorded make of both works amounting to 21,785 tons, the yield of four furnaces, or an average make of 5469 tons per furnace. In the year 1861 the Seend Works appear to have been standing, while those of the Westbury Company were but partially employed, there being but one furnace in blast for a period of eight months; at this period and in subsequent years the production of the Wiltshire furnaces is included with that of the Somersethire works.

Before giving the united production of the furnaces of Wilts and Somerset, it is only necessary to add that the Westbury Company put up a third furnace in the year 1862, and a fourth about the year 1865. The works at Seend appear to have been in abeyance for some years, since 1860; later a change of ownership took place, and in the year 1870 we find the Messrs. W. and S. S. Malcolm and Co, renewing the manufacture of pig-iron with one furnace in blast, increasing the number in later years to two. A change of ownership again occurred in the year 1874, when the works were carried on by the Ducal Iron and Coal Company, who do not appear to have had any furnace in operation in that year. The following abstract shows the production of the Wilts, Gloucester, and Somerset furnaces in each of the years named:—

Wiltshire. Gloucestershire. Somersethire. Total Years.

Furnaces. Furnaces. Furnaces.

Years		W		ire.	GI	ouc	es	tersh		. Son				Total tons.
		ilt	-in	blas	t.]	Bui	lt-	-in t	las	t. Bu	ilt-in	bla	st.	Pig-iron.
1861		. 4		. 2 .			9		3		2	. 1		40,493
1863		. 5		. 2 .			9		5		2			51,968
1863		5		. 3 .			9		6		2	. 1		64,001
1864	*******	. 5		. 3 .			8		6		2	. 1	*** ****	65,312
1845		. 3		. 3 .			0		6		9	. 1		45,471
1866		. 3		. 3 .	*****	!	10		8	******	2	. 1		59,817
1867														71,184
1868														75,847
1869														81,306
1870														93,601
1871														99,997
1872														44,255
1873		. 7	******				_		_		1	. 1	********	48,944
1874		. 7	****	. 3			_		*****		1	. 1		35,115

enables us to ascertain that the average quantities of ore employed varies from 64 to 65 cwts. to each ton of pig-iron made; the yield of the ore in metallic iron varying, as stated in the analysis of the Westbury ore, from 38 to 4139 per cent. The quantity of coal employed in like manner in the production of each ton of pig-iron does not exceed 55 cwts.; this includes the coal used for calcining the ore, for heating the blast, engine coal. &c., coke alone being used in the blast furnaces in the smelting of the ore, which is computed in the above 55 cwts, as coal. The actual quantity of coal employed in the Wiltshire furnaces in the manufacture of pig-iron amounted in the year 1872 to 127,255 tons, in the year 1873 to 119,793 tons, and in the year 1874 to 91,333 tons. The coal employed by the Westbury Company at their furnaces is obtained from their own colliery at Newbury, near Nettlebridge, in Somersetshire; it is proviously colled as before attack and is found to work well. it is previously coked, as before stated, and is found to work well in the blast furnace.

In the blast lumace.

Thirty years previously—in the year 1840—it was stated by Mr. G. R. Porter in his paper on the Progress of the Iron Industries in Great Britain, read at the meeting of the British Association in the year 1846, that Mr. Wm. Jessop, of the Butterley Ironworks, in Derbyshire, instituted a careful enquiry into the question of the consumption of coal in the make of pig-iron, which embraced the production of every ironworks in the kingdom. This return, which we give in detail, will serve as a useful basis of comparison, the pig-

manufacture 4,877,000						-, -	ortenting.
Districts.	Buil	t.		last.	Pig-fron Tons,	made	Coal near
Forest of Dean		*****	4	******	15.500		TODR
North Wales	15	*****	12		26,500	******	1,436,000
Northumberland Yorkshire	33	******		*****	11,000		88,500
Derbyshire North Staffordshire	18	*****	13	******	31,000		306,500
South Staffordshire	135		116	******	407,150	*****	83,000
Shropshire Scotland				******			409,003
					211,000	*****	723,000
Total	490		402	*****	1,396,400	*****	4 877 000

and since, the Mining Record Omce has made this question one of special enquiry, and the result shows that the quantity now enployed does not exceed in the making of each ton of pig-iron from 50 to 51 cwts. In England and Wales the average appears to be about 50 cwts. of coal, and in Scotland 55 cwts., raw coal being printed.

cipally employed in the Scotch furnaces.

The following statement for the years 1872, 1873, and 1874 will show the production of pig-iron in Great Britain, and coal need in its ma

nufacture:-		and a second of the	r coar ase
1872. EnglandTons Wales	1,090,000	***************************************	2,807,887 3,215,500
Total 1873. England Tons Wales Cotland	4,688,199 885,252	Tone	Coal used. 11,804,512
Total 1874. England Tons Wales Scotland	4,417,139 746,592	Tons	Coal used. 11,880,851
Total	K 001 409		3.5 000

Total 5,991,408 15.292,301

It will be remembered that in the year 1872 a considerable increase took place in the cost of coal, and in the manufacture of pig-iron, leading to higher prices than had ruled in previous years. To show the fluctuations in the prices of pig-iron per ton since that pend, the following statement is selected, and exhibits the highest, lowest, and average prices per ton of the following descriptions of pig-iron in each of the years 1872, 1873, and 1874, deduced from the weekly quotations of each description at the place of manufacture.

ations of each description	at	tne	p	lace	or	ma	ını	itaci	ur	0:-	-	•
Welsh pig, in Wales	hes	t pr	ce	. Lo	wei	st p	rie	e. A	ver	3.0°e	price	
Welsh pig, in Wales	£7	5	0		£5	0	0	*****	£6	12	D. soa.	
Scotch pig. Clyde	7	7	6		4	- 1	0		- 5	10	a	
Cleveland pig, Tyne and Tees	6	2	6		3	9	0		5	4	6	
Shropshire, at works	- 8	5	0		4	15	0		6	7	0	
Northampton, at works 1873.	6	15	0	*****	4	5	0	*****	5	14	0	
Welsh pig	26	15	0		£5	15	0		€6	10	6	
Scotch pig	7	19	0		- 5	16	0	*****	-6	10	A	
Cleveland pig	6	7	6		4	10	0		5	15	0	
Shropshire pig	9	0	0		6	15	0		- 8	0	0	
Northampton pig				*****						-	-	
Welsh pig	£5	15	0		£5	5	0	*****	£5	7	6	
Beoteh pig Cleveland pig Shropshire pig	. 5	12	3		4	6	0		4	19	0	
Cleveland pig	4	13	6		3	7	6		3	15	6	
Shropshire pig	8	10	0		5	17	6		7	1	0	
Northampton pig	5	15	0		4	0	0		4	9	9	
PROTONE AND CHATP AS	Fr.	17377	20	T	ha	im	mo	dias	200	lint		4

Northampton pig

LIMESTONE AND CHALK AS FLUXES.—The immediate districts of the iron furnaces in Wiltshire furnish valuable materials for this purpose as reducing agents in the smelting of the ores. Two materials are at hand and employed—the one an oolitic limestone, the other a hard chalk, both rich in carbonate of lime, as will be seen by the following analyses of each variety:—

Oolitic limestone,

1:833

2:700

Uxide of fron	second and a company of the company
Oxide of manganese	0.721
Alumina	1.102
Potash	0.584
Soda	
Sulphuric acid	0.897
Phosphorie acid	Trace
Silica	1.204
Water and loss	1':68 = 100.000
e other material employed—the	hard chalk -is composed of
lowing constituents:-	Hard chalk.
Carbonate of lime	93.104
Magnesia	0.189
Silica	1.110
Chloride of sodium	Trace
Carbonate of iron	

nium, and an artificial graphite known as "kish."

HAMPSHIRE—MANUFACTURE OF CHARCOAL PIG-IRON.—A few years since, about 1868, the Messrs. Harrison, Ainslie, and Co. erected a blast furnace at Warsash, near Tichfield, in the above-named shire, for the manufacture of pig-iron with charcoal; this furnace was pid in operation in the year 1869, and has since that time continued with occasional intervals to make charcoal pig-iron according to the supply of charcoal obtainable from time to time in the neighbourhood and in the South of England.

The same firm have other furnaces at Bonawe, in Argyleshire; Marchand, near Ulverstone, and Backharrow, near Haverthwalk.

The same firm have other furnaces at Bonawe, in Argyleshie; it Newland, near Ulverstone, and Backharrow, near Haverthwita, both in Lancashire; and a fifth at Duddon, in Cumberland. The above-named furnaces of the Messrs. Harrison, Ainslie, and Co. as the only examples now remaining in Great Britain in which chrocal is alone employed in the manufacture of pig-iron. The assembled in all the above works being the rich red hematite of Licashire—yielding from 64 to 66 per cent. of metallic iron—addrived from the mines of the firm situated near Ulverston, the derived from the mines of the firm situated near Ulverston, the quantity of iron annually produced is not considerable, but it enjoys a high reputation, always finding a ready market from its superior is the het puality, and for toughness and strength may compare with the best charcoal iron of Sweden, Norway, and Russia.

A noticeable feature connected with the Warsash furnace, which is identical in form with the other furnace, of the ferm shore is

A noticeable feature connected with the Warsash furnace, which is identical in form with the other furnaces of the firm above ferred to, is that suitable mechanical arrangements have been successfully introduced, by which the gases escaping from the top of the furnace are utilised and made available as a source of heating power in raising steam, and for the other purposes in which steam power is employed in the Warsash works.

We have no precise information as to the quantity of charcal used in the manufacture of each ton of pig-iron in the above-named furnaces, but referring to Mr. I. Lowthian Ball's "Notes of a Visit to Coal and Iron Mines and Ironworks in the United States," we there find that the average consumption is set down at 110 bushels of charcoal to each ton of pig-iron made, and assuming each bushel of charcoal to weigh 22 lbs., we have a fairly reliable average of the charcoal to weigh 22 lbs., we have a fairly reliable average of the

talists that pi

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JULY quantity United St

1866 1867 1868 1869 1870 The to charcoal each of t the producers

. 1876.

83,000 409,003 723,000

,877,000

the average s, while the anufactured airies insti-60 cwts, of

year 1872 tion one of

y now em-z-iron from pears to be being prin-

d 1874 will coal used in

ll tised

211,729

718,532 1 used.

le increasa

at, lowest, f pig-iron he weekly

d of the

e Exhi-the ma-ch they

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ty, and white

n, the njoys perior e best

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untily employed. The production of charcoal pig-iron in the onsuming in States is shown for a few 314,341

The total production of pig-iron in the United States, including charcoal and coke pig-iron, amounted to the following quantities in each of the same years; side by side will be found for comparison the production of Great Britain:—

the production of Great Britain:—

Listo.343

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Great Britain.
.... 4,523,897
.... 4,761,023
.... 4,970,208
.... 5,445,757
.... 5,963,515
.... 6,627,179
6,741,929 1,350,343 1,461,626 1,603,000 1,916,641 1,865,000 1,912,608 2,830,070

2,839,070 6,827,179
6,827,179
6,827,179
6,741,929
1873 2,695,434 6,596,451
1874 2,889,413 5,991,4 8
1875 2,889,413 Not yet ascertained.
In the year 1872 a greatly increased production of pig-iron is apparent; this was due to the high prices ranging in that and the previous year, the demand for iron being considerably above the average, proving a great incentive to the ironmaster to increase his yield, and had that prosperity continued the production of subsequent years would have been considerable; the financial crisis that followed led, however, to diminished production.

THE AMERICAN PROTECTIVE TARIFF.

The Americans have done their best to keep British iron and steel The Americans have done their best to keep British iron and steel cut of the American markets by inducing Congress to enforce a protective teriff. But they have not resorted to or relied upon a protective teriff alone; on the contrary, they have done their utmost—tective teriff alone; on the contrary, they have done their utmost—and done it, too, with success—to develope a vigorous metallurgical industry, irrespective of any legislative patronage or aid. The demand for certain qualities of pig-iron which prevailed a few years since in the United States induced American ironmasters and capitally avaning American orea and the result have been mand for certain quantities of pig-ron which prevailed a few years since in the United States induced American ironmasters and capitalists to carefully examine American ores, and the result has been that pig, said to be equal in quality to English or Scotch pig, can now be furnished to the full extent required, and at moderate prices, or relatively moderate prices. American ironmasters appear to have comprehended the fact that if they hope to retain the protective tariff, of which they are so fond, they must be content to produce at a comparatively cheap rate. A democratic Government may be brought to give its consent to a system of protection to native industry so called, but it will never consent that one branch of native industry should thrive inordinately at the expense of other sections of the community. Such a system might be possible in autocratic Rassia, but it could never last long in democratic America. Hence, inspite of the protective tariff established by Congress, the price of ion and steel has been gradually declining in the United States—partly in obedience to the inexorable law of supply and demand, and partly through the natural tendency of the Americans to compete more or less inveterately with each other.

The railroad interest of the United States has undoubtedly profited very materially from the rapid development of the manufac-

The railroad interest of the United States has undoubtedly profited very materially from the rapid development of the manufacture of iron and steel which has taken place in the Great Republic during the last ten years. With the increase which has been gradually but steadily taking place in the weight of locomotives on both sides of the Atlantic—with an increase, too, in the weight of curs, their load, and the speed of trains—the continuance of iron rails became a matter of ever increasing difficulty, especially upon the lightly and in the first instance imperfactly, constructed rails. rails became a matter of ever increasing animatity, especially upon the lightly, and in the first instance imperfectly, constructed railroads of the United States. Steel rails happily came to the rescue; if this had not been the case, American railroad managers would possibly have had to go back to light locomotives, light cars, and slow speeds. Such a retrograde policy as this would, of course, have added rather materially to the cost of transporting men and commodities from point to point, and would by consequence have in-

commontes round point on point, and would be somewhere have a free fitted a rather serious blow upon the prosperity of the United States. But, as we have already observed, steel rails came to the rescue of the American railroad interest; and not only have they done so from a mechanical but also from an economic point of view. As the demand for steel rails has increased in the United States, the means of mand for steel rails has increased in the United States, the means of producing them has grown in a still more rapid ratio, and the result has been that their price has been declining year by year. The reduction which has also taken place in the price of both iron and steel rails in both Great Britain and Europe has, of course, exerted some influence upon American markets; still the progress of American production has also powerfully contributed to the downward tendency which has prevailed in quotations. In 1866, 1867, and 1868, steel rails brought about \$160 per ton upon the New York market, anteven in 1869 they made \$132 per ton upon the same centre. In 1870, however, they sunk to \$106 per ton, and in 1871 to \$102 per ton. The feverish activity which characterised the American railrasd interest in 1872 and 1873 caused a rally in prices in those years, but in 1874 quotations sunk to \$94 per ton, and in 1875 to \$75 per ton.

JET MINING AND WORKING.

Found generally in the upper lias bed, once along the coast from Whitby to Staithes, and now chiefly in the Cleveland hills, jet has been long worked in Cleveland-so long, but until latterly so quietly, that history records not its early phases. Whitby has long been associated with, first, jet mining, and latterly with jet working; and although newer and more expansive trades have been introduced into that ancient town, jet working is still its staple trade, but mining for the material seems to be removing to a greater distance from the town. The cliffs to the north of Whitby have furnished some of the most valuable finds, and a seam met with some two or three years ago near Codhill was estimated to be of the value of 1000.; but of late the chain of hills from Ingleby Greenhow towards Northallerton have heen the chief places worked, and at present the inner sides of the hills converging into Billsdale furnish the bulk of the jet now sent from Cleveland to the chief seat of manufacture. Along the coasting cliffs jet is sought by what is called "dessing," or literally quarrying down the seaward face of the cliff, and some valuable coastside seams have been discovered by the set in the way in the which the which the which the which the welland of the search and th paration of Spanish jet, the number is much lewer. The mode of playment of the miners varies; in one or two instances the amount realised by the sale of jet after the payment of ground rent, is equally divided amongst the fine workers and the "jet master" who has furnished the capital; in another the co-operative system has been tried, the master another the co-operative system has been tried, the master another the co-operative system has been tried, the master another the co-operative system has been tried, the master another the co-operative system has been tried, the master another the co-operative system has been tried, the master and the co-operative system has been tried, the master and the co-operative system has been tried.

will bear no polish-it will be found to be a hazardous speculation. For the miner, when demand is fair, as tools—save the spade—are found him, as the work is of some eight hours daily, and though laborious, is largely free from accident, the wage paid contrasts most favourably with that for agricultural labour, of which it is the

laborious, is largely free from accident, the wage paid contrasts most favourably with that for agricultural labour, of which it is the substitute in most of the cases.

Whitby is the almost invariable place of jet "manufacture." The first process is—after the removal of the "scar," dirt, &c.—the sawing of the block into sizes suited to the objects for which it is to be used, and then the rubbing on small grindstones, diven rapidly by a treadle, and it then passes into the carving rooms. Here, with small leather-bound chisels, the pattern is cut, foot lathes cutting the holes in flower pieces, &c., and of late the artistic nature of these cuttings and carvings is greatly improved, whilst a further excellence appears to be probable from the associated efforts of many interested in the jet trade. And as a result of this there is a greater fidelity to nature visible in the fruit and flower pieces, an increasing nicety in the shaping of the necklets and coronets, and a greater approach to artistic outline in the shaping of the heads of brooches. After this cutting the carved goods are polished, which is effected by their being held against rapidly revolving wheels, which are covered with chamois leather, the hollow parts being rubbed with strips of list, the polish being given by lamp-black. Except pricing, packing, and carding, this is the concluding process in the simple one of manufacture. The workmen, it may be added, serve an apprenticeship; piecework is the usual mode of payment, and as jet acquires a largely enhanced price from the work, the rate and wages is tolerably good.

In proof of the last remark it may be added that though rough

acquires a largely enhanced price from the work, the rate and wages is tolerably good.

In proof of the last remark, it may be added that though rough jet ranges in price from 2s. to 10s. a pound, the finished work realises often more than six times the latter amount, but there is considerable waste, usable only in the shape of beads, and other very small articles. The value of the jet trade to Whitby has been variously stated; as low as 20,000k, and as high as five times that amount has been stated, and probably now the produce of it will be nearest the latter amount, whilst the number of persons employed in Whitby in the trade is said to be above 1200, or, roughly speaking, a twelfth part of the population.

NEW CONSOLS SILVER WORKS.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—I have reason to believe your correspondent of last week is correct in saying this concern is working to a profit, and as I have steadily held on to my shares I advise my co-shareholders to do likewise. It has always been understood that when once the difficulties connected with new furnaces and new processes were got over the concern would go ahead rapidly, and I heard in Liskeard last week that if the concern were in local hands it would be looked up to as a prize second only to the celebrated Devon Consols. The opinion seems to be that the shares are unduly depreciated, and that speculative offers of stock on a dull market is the sole cause, but this is certain—no shares are really to be got, and whether 1000% per month profit is being made or not, it is not likely that persons will now sell their shares for a trifle when a few months will double their value. This concern can make 50,000% a year profit without much trouble, and those shareholders who buy shares at present cheap prices will in a few months double or treble their money. I advise all who are shareholders and interested in manufactures to visit these great works, and see with their own eyes the extraction of these great works, and see with their own eyes the extraction of the four metals, and then to double their holdings, and on no account to sell a share, and thus play into the hands of "bears," who would only be too glad to get into this concern.

S. T. B.

[For remainder of Original Correspondence see this day's Supplement.]

THE PULSOMETER. [FROM A CORRESPONDENT.]

It not unfrequently happens that principles which, theoretically considered, appear least likely to prove successful are shown upon practical application to be capable of giving highly satisfactory results, and a striking evidence of this is to be found in the pulsometer, now being introduced as the "best steam-pump in the world" by the Pulsometer Company, of Queen Victoria-street. The three or four years experience with the pump in America has led to its being referred to as one of the most remarkable strides made in the simplification of machinery during the present century, and the opinion is expressed that within certain well-defined limits it is likely ultimately to lead to the abandonment of the more complicated forms of steam-pumps. The principle applied in the pulsometer was really put into practice 200 years ago, when Thomas Savery attempted to raise water by the direct action of steam upon its surface out of chambers into which it is lifted by atmospheric pressure, the vacuum being formed by the condensation of the waste steam, but owing to some defects in detail the principle was speedily abandoned altogether, and until within the last few years the application of the steam pressure upon a piston, instead of directly upon the liquid to be r-ised, came to be regarded as a necessity.

The original features which distinguish the Pulsometer from the older engines of the same type are described as being very striking, and essential to its success. The condensation is not effected by the cooling of the vessel, either by an external shower, as in Savery's, or by an internal injection, as in Desagulier's apparatus, but by the sudden contact of the steam, after it has fulfilled its duty of depressing the water in one of the chambers with the surface of that water, and it is explained that no other cooling takes place than is due to the entrance of the fluid, at whatever temperature it may be desired to pump it. The other original and most ingenious feature is the automatic action of the valve which regulates

due to the entrance of the fluid, at whatever temperature it may be desired to pump it. The other original and most ingenious feature is the automatic action of the valve which regulates the flow of steam to each chamber alternately, and thus controls the number of pulsations and the quantity of liquid discharged. Simple as the action of the pulsometer is in its present form, its simplicity has, it is said, been the result of almost innumerable experiments and failures by the patentee, yet it is by a combination so elementary as to be almost absurdly wanting in detail that the present excellent results have been produced.

The Pulsometer consists mainly of a single casting called the body, which is composed of two chambers joined side by side, with tapering necks bent towards each other, and surmounted by another casting called the neck, accurately fitted and bolted to it, in which the two passages terminate in a common steam chamber, wherein a ball

manfacture. Along the coasting cliffs jet is sought by what is called "dessing," or literally quarrying down the seaward face of the cliff, and some valuable coastide seams have been discovered by the action of the sea, but in the hills tunnelling (much in the manner of the Cleveland iron mines, but in a less systematic mode) is the invariable way. The stratum in which jet is found lies below the alum rock; it is usually some 20 ft. in thickness, and as old workings of some 6 or 8 yards deep aboun!, these must be cut past. Generally a drift is run in for about 80 yards nearly level; the shale and earth being run out and tipped down the face of the hill. From the drift cross sections are cut about 150 ft. in length, and in these the miners pull down with pick and shovel the earth retreating before it till each way is thus worked out. The jet is invariably invariably found, and the miners found, partly on this, a theory that it has at some time been liquid. The mode of working the mines pealiar to the trade—it is neither by royalty on output nor lease of pits, but it is by payment for the right to work from a certain are an foreground—usually 200 yards—to any depth, the number of men being restricted to six on an average for the length of foreground—usually 200 yards—to any depth, the number of men being restricted to six on an average for the length of foreground stated. Three years ago in Bilsdale alone there were above 200 jet miners at work thus, with a few companies near Guisborough additional. Now, through the decline in the demand, and the importance of the number is much fewer. The mode of payment of the miners varies; in one or two instances the amount realised by the sale of let after the payment of ground rent, is equally the sale of let after the payment of ground rent, is equally the sale of let after the payment of ground rent, is equally the sale of let after the payment of ground rent, is equally the sale of let after the payment of ground rent, is equally the sale of let after the payment of grou pump being filled with water is ready for work. Steam being admitted through the steam-pipe passes down that side of the steam neck which is left open to it by the position of the steam ball, an presses upon the small surface of water in the chamber which d exposed to it, depressing it without any agitation, and consequently with but very slight condensation, and driving it through the discharge opening and valve into the rising main. The moment that the level of the water is as low as the orifice which leads to the discharge the steam blows through with a certain amount of violatical states. discharge the steam blows through with a certain amount of subsistence money and equal shares in half of the net receipts, the remaining half being the master's remeration; but the bulk of the miners receive a weekly wage, and prefer the system. Hence the risk is generally the jet master's, and though the price of jet has been high—in some cases as much as 16s, per lb. have been paid for choice specimens—yet when it is remembered that the price is a fluctuating one, that the quantities found are usually small, and that they are lessened by the "doggers" found in the seam and he the dezed jet—that which

With regard to the working of the pump in America the company with regard to the working of the pump in America the company have received a large number of very flattering testimonials, showing that it is largely employed in mines, manufactories, and by railway companies; that it gives general satisfaction, is unchokable, sand, mud, peat, &c., passing without any inconvenience; that there is exceedingly little wear and tear, whilst there is nothing to get out of order, and that very little steam is required to work it—greater recommendations than these can scarcely be desired.

MINING NOTABILIA

EAST CARADON.—The statement of accounts for 12 weeks to June 10, presented at the meeting of adventurers held at Salisbury on the 12th inst., showed only a balance of 15 %. 12s. 8d. in favour of the mine. The agents reported that since the last meeting they had removed the drawing lifts below the 100, at William's shaft, and fixed a new plunger-lift at the 130, and resumed the sinking of the shaft; it is down about 4 fms. below this level, and the ground continues hard elvan—Child's Lode: The winze in bottom of the 130 has been sunk about 5 fms., but owing to the increase of the water the men had been put to rise and stope the back. The lode in the 130 east, on south part, is 1ft wide, chiesly peach. The ground by side isfavourable granite.—Caunter Lode: The 130 east continues large, composed chiefly of capel and mundic, with a little ore intermixed.

SOUTH WHEAL CROFFY.—1s the manage of this mine in Germany, or where is he? Or are his engagements so numerout that he cannot find time to send a report to the Journal? I have seen no report since the last account, but I am pleased to observe by a local paper there are 168 tons of copper ore for sale next week. It is important, and only reasonable, that the shareholders should know what the progress of operations are between one account to the other. Most agents think it their duty to send a report to the Journal to the fullest information should be given through the Journal: many of us know that these shares have been as high as 120t., and now only 16t. to 17t.—A SHAREHOLDER.

LLAN RWST.—This company is expected to be one of the most successful mining enterprises opened out and discovered within the last ten years. The lodes are a numerous, and all of them are prolific in rich lead ore are said to be on the surface, besides about 27,000t, worth of lead opened upon and discovered below, waiting the completion of the machinery and the dressing-floors, for the purpose of preparing the lead and sending it to market, when it is expected that large sales of it will take

Machine Puddling in Staffordshire.—What promises to be an admirable furnace to aid in the mechanical production of iron has just been started at the Round Oak Works by Mr. Smith-Casson, manager for that portion of the Earl of Dudley's property. It is a Casson-Dormoy furnace, to which Mr. Casson has attached a gasmaking apparatus. The apparatus is not wholly unlike that connected with the Bicheroux furnace, which is likewise in operation at the same works, but it has points of superiority which make it more service able and effective. Coal is admirted to the furnace through a hopper, and is drawn down to a slanting grate. From the hollow casing of the chimney stack hot air is pulled down, and is driven into the gast Cannace from the front of the grate. At the same time hot air passes round the top and the bottom of the furnace, and meets and fires the gas as it escapes over the bridge into the puddling furnace. The gas after doing its work in the furnace passes into the heating chamber between the furnace and the stack, and after having there heated the pig-iron about to feed the puddling-furnace, is utilised in the heating of a steum boiler crected along the top of the furnace. The gas seems to be well at the disposal of the puddler, and evidently supplies both a fierce and a pure flame. The furnace has just been started for the first time, and on the first day in six turns it produced 3 tona 16 cwts., and on the first day in six turns it produced 3 tona 6 cwts., and on the first day in six turns it produced 3 tona produce 90 tons of iron per week, but that, fired with gas in the manner described. 120 tons in a week may be got out of the same plant. The rabbles are worked upon a principle invented by the engineer of the Round Oak Works, which is an improvement upon Griffithis method. This gas and blast apparatus of Mr. Smith-Casson promises, when attached to a Casson-Dormoy furnace, to produce paid ded fron with almost the minimum amount of labour for such machinery.—

IN VOLUNTARY LIQUIDATION UNDER THE COMPANIES ACT, 1862.

IN VOLUNTARY LIQUIDATION UNDER THE COMPANIES ACT, 1862.

THE NEW LLANGYNOG LEAD MINING COMPANY (LIMITED).

OBE SOLD, BY PRIVATE TREATY, ALL the BENEFICIAL INTEREST of the New Liangynog Lead Mining Company (Limited) in the LLANGYNOG LEAD MINES, comprising all the valuable, productive, and extensive mines, veins, beds of lead, ores of lead, and other metals and minerals known collectively as the Liangynog Lead Mines, and in the reservoir, water-supply rights, easements, and interests thereto belonging, situate in the several parishes of Liangynog, Lianrhaiadr-yn-Mochnant, Hirnant, and Pennant, in the county of Montgomery; and also the WHOLE of the movable PLANT and MACHINERY of the said company.

The Lingynog Lead Mines have been a highly productive and dividend-paying property.

The Llangynog Lead Mines have been a nignty productive and directory and property.

The mines, machinery, and plant are in working order, and considerable quantities of ore are now being raised.

The works may be inspected at any time upon application to the Manager at the Mines. The leases and agreements may be inspected at the offices of Messre. LONGUETILLE, JONES, and WILLIAMS.

All further information may be obtained, and maps of the property inspected on application to Messrs. Geo. HASWELL and SONS, 84, Foregate-street, Chester to HENRY DENNIS, Esq., Mining Engineer, Hafod-y-Bwch, Ruabon; or to Messrs Longueville, Jones, and WILLIAMS, Solicitors, Oswestry.

NICKEL AND COBALT REFINING, AND GERMAN SILVER WORKS, 16, OOZELL STREET NORTH, BIRMINGHAM.

STEPHEN BARKER begs to inform the Trade that he has the following articles for sale:

REFINED METALLIC NICKEL.

REFINED METALLIC BISMUTH.

OXIDE OF COBALT.
GERMAN SILVER—IN INGOTS, SHEET, WIRE, &c.
NICKEL AND COBALT ORES PURCHASED.

GOLDENHILL COBALT, NICKEL, COLOUR, BORAX, AND CHEMICAL WORKS,
NEAR STOKE-UPON-TRENT, STAFFORDSHIRE
JOHN HENSHALL WILLIAMSON, MANUFACTURER AND REFINERS
Purchaser of Borate of Lime and Tinual.

LOCOMOTIVE TANK ENGINES

OR MAIN LINE TRAFFIC, SHORT LINES COLLIERIES CONTRACTORS, IRONWORKS, MANUFACTORIES, &c., from a superker effection, equal to their first-class Railway Engines, and special." \(\rho^2 \) preduces an heavy gradients, may always be had at a short notice from—

MESSRS. BLACK, HAWTHORN, AND CO.,

LOCOMOTIVE, MARINE, AND STATIONARY ENGINE WORKS,

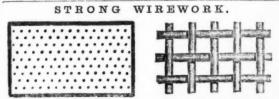
WILTON'S MATHEMATICAL INSTRUMENT ESTABLISHMENT. REMOVED from St. Day to A. JEFFERY'S, CAMBORNE.

W. H. WILTON begs to thank his friends for their liberal support for so many years, and informs them that (having opened business at Valparaiso) he has now declined business in England in favour solely of Mr. A. JEFFERY, MATHEMA-TICAL INSTRUMENT MAKER, CAMBORNE, whom he considers (having been an assistant to his father for seversi years) is in every way capable of creditably maintaining the good name universally awarded to Wilton's instruments.

A. JEFFERY

Respectfully begs to inform Mine Managers, Surveyors, Engineers, &c., the having purchased Mr. Wilton's business, and the very valuable acquisitions and appliances belonging thereto, he has enlarged his Mathematical Instrument Manufactory, and is prepared to supply Theodolites, Dials, Pocket Dials, Levels, Traysering and Plain Protractors, Cases of Drawing Instructuretts, Measuring Chaivs and Taper, Assayees' Scales and Weights, Engine Counters, and, in short, every description of Instruments used in Survexing, Measuring, Mapping, &c.

Repairing in all its branches promptly attended to.



STRONG WIREWORK, the cross wires equally bent; also BEST STAMP GRATES, both of iron and copper, and punched copper plates.

DITTO TUBBED. All the above promptly supplied at

W. ESCOTT'S MINING MATERIAL DEPOT,

TAVISTOCK, DEVON.

M R. J. S. M E R R Y

ASSAYER AND ANALYTICAL CHEMIST,

SWANSEA.

M B. R. PERCYROBERTS,

PINANCIAL AGENT,

(2), ENGLISH STREET, CARLISLE.

Registration of New Companies.

The following joint-stock companies have been duly registered:-The following joint-stock companies have been duly registered:—
SHEFFIELD COAL COMPANY (Limited)—Capital 90,000.; in 450 shares of 200. To acquire the business of coalmasters and merchants hitherto carried on by the firm of Jeffecek, Dunn, and Co., or the Sheffield Coal Company. The subscribers are—T. W. Jeffecek, Sheffield, mining engineer, 75: Deane Mann, Dunmovla Lodge, near Omagh, Ireland, 75: Henry Horncastle, Whitemoor, near Allerton, land agent, 100: Bernard Wake, Abbeyfield, near Sheffield, solicitor, 10: W. Dunne Gainsford, Richmond Hill, Norkshire, coalmaster, 49: Charles Warner, Clee, near Grimsby, clerk in holy orders, 1: T. R. Gainsford, Whitely Wood Hall, near Sheffield, coalmaster, 49: C. G. Vickers, Sheffield, solicitor, 1. The subscribers will be the directors, and Messrs. W. D. Gainsford and T. R. Gainsford will be managing directors, at a salary of 750% per annum each. The whole of the shares are taken up.

will be managing directors, at a salary of 150%, per annual cases, shares are taken up.

JEFFRESTON ANTHRACITE COAL COMPANY (Limited).—Capital 25,000%, in 16, shares. To acquire collieries in the parish of Jeffreston, and elsewhere in the county of Fembroke. The subscribers are—Thomas Stokes, Narbeth, gentleman, 500; Alexander Waters, Beyelly, engineer, 50; John Waters, Beyelly, engineer, 50; Charles Cifton Hood, 122, Cannon-street, gentleman, 10; Spencer William—Hustler, Gloucester, merchant, 1; W. Howell, Lewis, Narbeth, bank manager, 5; C. Allen, Tenby, gentleman, 500. This company is registered with cut avticles.

manager, 5; C. Allen, Tenby, gentieman, 600. This company out articles.

ORIENTALAMERICAN TELEGRAM COMPANY (Limited).—Capital 25,000...,
16 St shares. To take over the business of Mr. R. W. O. Roches, telegraph agent,
2c. The subscribers are—Charles Williams, 110, Cannon-street, 5; Joseph Danlels,
75, Brewer-street, Woolwich; R. W. O. Roches, 140, Leadenhall-street, 5: A. W.
Batchelor. 9, Newstead-road, Lee; H. Danlels, Molesworth street, Lewisham, 5;
M. L. F. Kutme, Glaskin-road, Hackney; S. Rebbens, Walington, 1.
TROJES MINING AND SMELTING COMPANY (Limited).—Capital 60,0004.

leaden Green
GBEAT GRIMSBY AND CLEETHORPE TRAMWAY COMPANY (Limited)
Capital 40,000l, in 5l. shares. To construct a tramway to the control of -Capital 40,000′, in M. shares. To construct a transway between Grimsby and Cleethorpe, Lincoln. The subscribers are James N. Hawes, Field House, Great Yarmouth: W. Sayer, Great Yarmouth, 1; August Theze, 12, Fitzroy-street Fitzroy-quare, 1; Victor Cousin, 1, Tielbourne-street: Alexander McPherson Great Yarmouth, 10; W. Trangman, 63, Prince's-terrace, Regent's Park, 1; E. Gardie, 11, Archer street, Great Windmillestreet. 1.

LICENSED VICTUALLERS TEA ASSOCIATION (Limited).—Capital 20,000/.

LICENSED VICTUALLERS TEA ASSOCIATION (Limited).—Capital 20,000., in Il. shares. To acquire the business of the Licensed Victuallers Tea Association. The subscribers are —E. Kynaston, 24, Mincip lane, 3000; C. F. Kemp, 8, Walbrook, 20; Harold B.own, 7, Walbrook, 5; E. J. Gardener, 85, Lea-terrace, Blackheath, 10; W. Fenwick, 124, Fenchurch-street; Robert Sutherland, 14, Church-street, 10; W. S. Foster, 395, Kennington-road, 50.
TRIGGERLESS RIFLE AND FIRE ARMS COMPANY (Limited).—Capital 25,000., in Il. shares. To acquire the patent rights of Mr. John Dunstan for the manufacture and sale of triggerless rifes, &c. The subscribers are—P. J. Bishop, Ca-endish road, Clapham, 20; G. Todd, East Hill Lodge, Wandsworth, 5; (c., J. Ponches, 6, Manse-terrace, Stoke Newington, 2; E. J. Cowton, 7, Stanley-terrace; N. D. Hutchinson, 29, Lam's Conduit street; John Simpson, 2, Great James street, Berford-row; S. T. Chrke, 10, St. Luke's-road, Westbourne Park, 5.
MODE WHEEL MILLS COMPANY (Limited).—Capital 26,0004, in 10l. shares. To curry on business as corn and logwood merchants. The subscribers are—Robt. Whitworth, 11, Cross street, Manchester, 500; Alfred Whitworth, 11, Cross street, Manchester, 100; J. Walker, 15, Cannon street, Manchester, 20; F. Moss, Didsbury, Lancashire, 20; John Greenwood, Eccles, 500.
THOMAS SIMPSON AND COMPANY (Limited).—Capital 28, 2004. in 10l.

pre-twood, Eccles, 5:00 THOMAS SIMPSON AND COMPANY (Limited).—Capital 25,000L, in 10L lares. To acquire a bone and manure business at Sleaford, Lincolnshire.

ECHOES FROM THE MINING MARKET.

We are able to record a much better feeling in mining affairs We are able to record a much better reeining in intuming analishmental markets are stronger, whilst on the part of the public there appears to be a greatly increased disposition to buy into all good marketable stock. The cheap and low-priced lead shares we referred to a short time since have been in demand at higher prices, and this has been practically noticeable in Glyen Great Wast Van referred to a short time since have been in demand at higher prices, and this has been particularly noticeable in Glyn, Great West Van (agood improvement has taken place here), North Laxey, Rookhope, and several others. Coal is slightly lower, but iron shows no change for the worse. Matters in the North appear inclined to improve: indeed, there are not wanting symptoms of a general improvement in trade throughout the country. Investors should not lose sight of the present opportunity, as when the market turns there will be a great rush to buy, prices in nearly all cases being still exceedingly low, and, therefore, far beneath what the real merits of the different mines warrant. We have just heard of an improvement at the Lovell Mine. For some little time rast we have noticed the good points they have had, and last week the various en-is were valued in the aggregate at 70. per fathom. For the past two months they have been driving through a hard lode of granite in the 30 end east, but now the level is clear of it, and the lode has opened out of ft. wide, worth 15\(leq \). per fathom, with every appearance of becoming a large and rich lode.

Owing to a visit to the North our remarks this week are somewhat curtailed, but in our next we hope to review in detail the various departments of the market.

JAMES H. CROTTS.

THE WEEK.

THE WEEK.

Monday, July 24.—A curious feature of to day was the demand for Sheffields, havars being apparently enanoured of the forthcoming dividend of ½ per cent. The rise altogether was one of 1½, to 72½. Caledonian, Metropolitan, and North British found buyers, and improved ½. Dover A in the morning were dealt in at 118½, but late in the afternoon, when the traffic return showed a decrease of 1762., there was a relarge to 117½. The Brighton traffic showed an increase of 33872. In mines, East Van fell 10.8½, achange for the worst, equal to 11. Der share. Great Laxey, 17 to 18 (et div.): West Tankerville, 1½ to 1½. Wey valley offered at 3½. Eberhardt, 8½ to 8½. Direct Cable, 8 to 8½; 160per, 1 to 1½; West India, ½ to ½. There was a total absence of business in the foreign market, what little was done consisted mainly of sales. Russian and Hungarian gave way about 1 per cent. all round. Mexican (old) rose 11.

There was a total absence of business in the foreign market, what little was done consisted mainly of sales. Russian and Hungarian gave way about 1 per cent. all round. Mexican (old) rose 11.

There was a not after being dealt in at 94½, the stock closed 93½ to 93½ at 180 of 1½. Caledonian advanced on the day ½, Great Eastern ½ Metropolitan District ¼, and Sheffield ½. Against this rise a fall of ½ in Bervicks, and one of ½ in Dover A must be noted. Eries, 12½ to 12½; Atlantic First, 22½ to 23½; ditto Dover A must be noted. Eries, 12½ to 12½; Atlantic First, 22½ to 23½; ditto Dover A must be noted. Eries, 12½ to 12½; that the first, 22½ to 23½. Strain agricultural rose 21, to 90%. Lion Brower were quoted 24½ to 15½; Native Guano, 3½ to 3½; General Credit, 6½ to 6½; Egy Horthers, 22 to 23. Very little Russian (1823), 83%; Argentine, 4½ to 45; and the first of the

in their bewilderment closing at 111, but the top price was really 110½ to 110½. Those who were "hears" yesterday of York, A. at 133 took the hint, but did not get much stock under 135 and 135. North British from 91 saw 98 to day. Midlands rose to 131, and Berwick recovered lost ground to the extent of closing at 157. Nothing was known during hours as to the dividend of this company. On it great issues now depend, gathering in intensity each hour as it is delayed. Brightons were almost unchanged, and showed signs of weakness in the morning. Bheffields were quite neglected.

PEIDAY.—The Berwick dividend proved to be one of 7 per cent., against 8½ this time last year; 7½ was expected in some quarters, but on the whole it gives satisfaction, and the stock has risen to 159½. Great Western are dull, at a fail of ½ per cent. owing to yesterday's accident to the express. Brighton and Sheffield are now quoted ex div., and the respective prices are 118½ to 118½ and 71½ to 12. British, 97½ to 37½; Midland, 130½ to 130½; Birmingham, 144½ to 145½. Two o'Cock.—Prices have improved, Great Western being 110½ to 100½; Caledonian, 121½ to 124½; and Sheffield, 72½. Midland have advanced to 131½, and Brimingham to 157½. Dover, A. has been dull, at 115½, and Berwick at 158; but the former are now 116, and the latter 158½. Four o'Clock.—Beyond an advance in Brighton to 120½, and a rise of 10s in Dover, A, prices are rather easier. Berwick are 157½ to 157½. British have been over 99, but are now 99½ to 199; Middand, 130½ to 131; Brighton, A, 107 to 107½. The settlement was concluded this after-boon, but not without two failures—both young members.

FERDINAND R. Kirie.

EXCHEQUER (Gold and Silver).—The Furnace: Bricks are being hauled to the site for the O'Harra furnace to be erected at the Exchequer mill. It is expected that the furnace will be getting out buillion on or before Sept. 1. It is a consolation to know that this is not another Alpine experiment. The success of this syle of furnace at Peavine has dispelled all doubts as to its ability to work our ores.—Alpine Carcatel, July 1.

Mining Correspondence.

BRITISH MINES.

ASSHETON AND WEST ASSHETON.—John Craze, July 27: The boundary shaft is now down 2½ fms. below the 70; set to nine men, at 1½. 15s, per fathom, to ent the lode. The 10 cross-cut is now extended about? fms. south; set to six men, at 7½. 10s, per fathom; the object of this cross-cut is to intersect the full control of the 10 cross-cut is now extended about? In the 50 west is set to four men, at 3½. 15s, per fathom; the lode here is 3 ft. wide, of a very promising character. The 60 east is now in 10 fms., and is set to four men, at 3½. 10s, per fathom; the lode here is from 2½ to 3ft. wide, producing good stones of lead and blende, and from its present appearance an early improvement may be expected.—Assheton Proper: We have set one stope in back of the 40 east, to four men, at 2½, per fathom, and are preparing for two more stopes in back of the same level. We have set the following tribute pitches:—Two men in back of the 40, east of Browne's, at 4½, per ton. Two men in back of the 40, east of Mawr, at 7½, per ton. Two men in back of the 50, east of Mawr, at 7½, per ton. Two men in back of the 50, east of Mawr, at 5½, 10s, per ton. Two men in back of the 50, east of Mawr, at 5½, 10s, per ton. Two men in back of the 50, east of Mawr, at 5½, 10s, per ton. Two men in bottom for the adit, on north and south lode, south of Lindow's shaft, at 7½, per ton. We are preparing for another parel of lead as early as possible. The pure ton. We are preparing for another parel of lead as early as possible. The pure ton. We are preparing for another parel of lead as early as possible. The pure ton. We are preparing for another parel of lead as early as possible. The pure ton. We are preparing for another parel of lead as early as possible. The pure ton. We are preparing for another parel of lead as early as possible. The pure ton. We are preparing for another parel of lead as early as possible. The pure ton. The pure ton the pure ton. The pure ton the pure ton. T

ders, and we hope to get the water-wheel on the mine next week. Our Collom's patent ore-washing machines are working well, and getting through a large quantity of stuff; although the halvans are poor, at the same time they will pay well for dressing.

DE BROKE. J. Phillips, July 28: A portion of the ore-bearing part of the lode, producing about 1 ton per fathom of lead ore, has been cut in the 35-cross cut. The winze sinking below the 2' will produce 2 tons lead ore per fathom. The stopes east and west of rise will produce 1½ ton per fathom. The stope at the junction is not quite so productive as hitherto, now worth 10th, per fathom. The continued dry weather has put a stop to our dressing of ore, but we have dressed and partly dressed several tous towards our next sampling.

DEN BIGHSHIRE CONSOLIDATED.—John Pryor. July 27: In the 112 east the ore is coming down from the roof into the sole of the level. This, we expect, are the runs or courses of ore dipping west to east. In the 112 east the ore is coming down from the roof into the sole of the level. This, we expect, are the runs or courses of ore dipping west to east. In the 112 west we have a splendid lode as regards appearance, yielding about the same quantity of ore as last reported. The No. 1 rise, towards the sump at Parys, is looking better than we have before seen it. In No. 2 rise we are getting some splendid stuff for the floors.—Dressing Floor: Good progress is being made here, and weshall to morrow sell for cash 5 tons of lead ore, price 13t, per ton.

DEVON OREAT CONSOLE—Jas. Richards, July 28: Wheal Anna Maria: Engine-Shaft: The ground in Jeffry's cross cut south at the 80 is favourable for exploring, and water continues to flow, an indication of more 1 doe standing in this direction — Wheal Josiah: Richards's Engine-Shaft: The cutting of plat and harrow-road at the 290 still progresses satisfactorily. In the 60 east, east of Oastle's cross cut, on the south part of the lode, the lode is 3 ft. wide, and worth 2 tons of ore, or 6t, per fathom. In

nice pieces of lead ore intermixed. I see no reason why we may not have a course of good orey ground before us here. The vein looks well for turning out very good re-ults.

EAST BASSET.—Richard Pryor, Edward Adams, July 23: The lode in the 47, east of flat-rod shaft, is 3 ft. wide for part carried, and worth 54, per fathorn, with a good appearance, und from present indications we think we are over a fine bed of copper ore: this end is set to six men, at 54, per fathorn. The lode in the stopes in bottom of this level (the so), and 16 fms, behind the present end, is 2 ft. wide, and worth 54, per fathom. The lode in the stopes in bottom of this level (the so), and 16 fms, behind the present end, is 2 ft. wide, and worth 54. Per fathom; stoping by four men, at 34, per fathom.

EAST VAN.—W. Williams, July 23: Tempest Shaft is down 30 fms, 2 ft. The lead still holds good in opening the lode east of A cross-cut; worth about 304, per cuting ince stones of ore, and likely to improve. I will let you know more about It in a day or two. This point, you will bear in mind, is about 25 fms, west of A cross-cut, between it and Van. I have only two men working here yet; but as soon as the weather changes, so as to afford us water to work the blast for ventilation, I shall be able to put more men on.

GAWTON COPPER.—G. Rowe, G. Rowe, jun., July 22: The lode in the 127-east is over 6 ft. wide, showing a very kindly appearance, being principally composed of spar, mundic, and ore to the value of 204, per fathom. The lode in the stopes in the back of the 117 is worth 84. per fathom. The lode in the 105 cast is producing good stones of ore, intermixed with ara-nical mundic. The lode the trise going up in the back of the 105 is worth 124, per fathom. The lode in the back of the 36 is is worth 84. per fathom. The lode in the stopes in the back of the 105 is worth 124. per fathom. The stope in the back of the six worth 84. per fathom. The lode in the winze sinking below the 95 is worth 74.

Per fathom. The lode in the 82 cast is yieldin

Tables ow controlled, is worth 12. per fathen; we have holed this end to the winze from the midway level, making good ventilation. We have a piece of groun to square down to make the level good to the east end of winze, where there is more valuable lode. The 78 west, on south branch, is worth 71, per fathom. Whidle Level East: In this end we have a good lode, worth 21, pr fathom. Whave commenced another winze in the bottom of this level to come down son 15 fathoms ahead of the 78 east; at present worth 151, per fathom, and likely improve. No change in the 65 east, or in the drivings on Harvey's north lod The 52 east, on caunter, is showing a little better appearance, with spots of copper and mundle, but the ground is still hard. The stopes and pitches throughout the mine are looking well, varying in value from 12t. to 20t, per fathom. The new shaft is now opened through to the 78, and the cutting it down to that level is in a very forward state. At the same time we are cutting place for angle bob at the bottom of the downright preparatory to fixing the rods, &c., below. We shall give the computed quantity of ore for August sale next week, which will be about 250 tons.

GLYN .- James Roach, July 24 : The ground in the 28 cross-cut north, from en

GLYN.—James Roach, July 24: The ground in the 28 cross-cut north, from engine-shaft, is still hard for deiving, but very congenial to the production of lead. In the winze sinking under the 15 cast the course of ore is continuous. The winze under the 15 west has passed through the hard ground and penetrated clay-slate, in which lead has made its appearance. The rise above the 15 cast contains a good lode of lead, which will be taken away by stoping.

(GOGINAN AND LEVEL NEWYDD—July 25: In the 120 west of cross cut, from Bryn Pica shaft, the lode is 4 ft. wide, containing a little lead and blende ores, but not sufficient to value; ground favourable for exploring. The 120, east of western shaft, is going forward in a large lode, and the pirt carried disseminated throughout with lead ore, producing 1 ton per fathom, and from indications is likely to improve. The 120, west of western shaft, is being pushed forward on the south part of the lode, which is strong, hard, and sparry, containing some good bunches of lead ore, worth 15 cwts, per fm. In winze below the 110, 81 fms. west of Bryn Pica shaft, the lode is 6 ft. wide, and will produce 16 cwts. of lead ore prefathom. The lode in the winze sinking below the same level, 35 fms. vest of Bryn Pica shaft, is producing some good ore at times, and there is more lode standing to the south, which will be out through when the winze is deep enough for the 120. We have commenced preparations for cutting plats, putting in timber, &c., at the 120, and shall resume the sinking of the western shaft as soon as we possibly can.

The tribus pitches are without any change of moment, yielding from 14 cwts. to

work going regularly, but the weather is so very hot and dry that our water up ply will be exhausted again in about a week unless we get some rate. The parties of ore we sold yesterday realised 167. 38. 5d. per ton. GORSED AND MERLLYN CONSOLS.—Wm. Edwards, July 27: The set shaft sinking is progressing as favourably as we could wish. We have a full concept this week.

peoce, pueze, as value stands. As per standard, a more stope in the roof of the shaped on of the branches only is carried at present, which is worth of the standard in one of the branches only is carried at present, which is worth of the standard in one of the standard in the standard should be a standard on the standard should be a standard s

heady sunk in the ore positive the second sunk in the ore positive the so south, by six men, the month, at 20, per fathom; lode worth 70 frive the 50 south, by six men, the month, at 100, per fathom er fathom. The engine-shaft is 4 fms. I ft. below the 50; lode—contract not out. To drive the 35 north, by six men, the mole producing occasional stones of lead. A winze to sink below ix men, at 100, per fathom. To drive the 35 cross-oat west, by far fathor it there has nothing been met with here yet of any did to drive north, by two men, the month, at 20. 15s, per fat gossan. The winze below the adit, by four men, the month, at he lode is composed of gossan, mundic, an i spots of lead.—Te of the 50 north two tribute pitches, by four men, at 90, per to fithe 50 north two tribute pitches, by four men, at 90, per to the 50 north two tribute pitches, by four men, at 90, per to the 50 north two tribute pitches, by four men, at 90, per to the 50 north two tribute pitches, by four men, at 90, per to 15 the 50 north two tribute pitches, by four men, at 90, per to 15 the 50 north two tribute pitches, by six men, at 100, per 60. the lode is composed of gossan, mundic, an ispots of lead.—Tribut: In the 50 north two tribute pitches, by four men, at 92. per ton. In the last 55 north three tribute pitches, by six men, at 102. per ton. In the last 35 south, one pitch, by four men, at 104. per ton. In the last of trial shaft, two tribute pitches, by four men, at 102. per ton.

NEW CONSOLS.—R. Pryor and Son, Thomas Jenkin, H. Vial, July 26 last the past week there has been no change worthy of remark in any of our sense tutwork bargains, and they continue to produce their usual quantity and stuff. At surface everything is progressing favourably, and with lighty gaing results.

NORTH POOL.-W. C. Vivian, July 27: We have advanced portly on the cross course in the 25, and continue to meet with ex-NEW NORTH POOL.—W. C. Vivian, July 27: We have an 6½ fms. north on the cross course in the 25, and continue to meet we specimens of copper, together with every appearance and characterist of there being a highly productive lode before us. We have no right calculate on intersecting the lode until we have had at least six w driving on the cross-course, although it is possible the lode may be cross-course, and that we may reach it on the eastern side of same so the western. It is not yet two months since we commenced driving the view of proving the great lode which is seen in the engine-shall level, and I think the progress made is highly stil-dactory, whilst V presented by the cross course are such as to create the strongest confunctions of the lode.

level, and I think the progress made is highly satisfactory, while the presented by the cross course are such as to create the strongest confident productive character of the lode.

NEW ROSEWARNE—E. Hosking, W. Bennetts, July 26: The operation of the month have been confined to the driving of the 67 and the pitches in the bottom of the 58. The lode in the 67, west of Pool's shift wide, of a very kindly appearance, composed of quartz, biende, mundle, as stones of copper ore; the end is letting out a quantity of water. We have opinion of the end and bottom of this level, and recommend the carrying our suggestions—the cutting down of Rule's shaft and sinking below the force opper ground, as there are 20 fms. driven through in this level that so work until the scalt is brought down. We have the necessary pirson mine, therefore the whole cost of bringing down the shaft, fixing pixed

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2 ft. wide, rich lode a the 110 to to 10 cwts. - R. Re of next we NORTH our pay ar particular being mad 80 end aga ver lead on PARYS phur and been broke of the fore in this dir It will be PATEL we have of have also ore, maki

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water mp. The par : The new a full com-te from the

would not exceed 500t., and could be done in four months. Our cost for the four wells anding July 29 will be 190t.—that is, all bills and labour. Including the tri wells anding July 29 will be 190t.—that is and in July 20 will be 190t. The balts. We have on the mine about 12 tons of copper ore, which, according to balts. We have on the mine about 100t, thus leaving a loss of about 90t. on the month's gastly will realise about 100t, thus leaving a loss of about 90t. on the month's gastly will realise about 100t, thus leaving a four properties will be made, and just a slight improvement, which may be a doubt discoveries will be made, and just a slight improvement, which may be a doubt discoveries will be made, and just a slight improvement, which may be a doubt discoveries will be made, and just a slight improvement, which may be a doubt discoveries will be made, and just a slight improvement, which may be a doubt discoveries will be made, and just a slight improvement, which may be a doubt discoveries will be made, and just a slight improvement, which may be a doubt discoveries will be made, and just a slight improvement, which may be a doubt discoveries will be made, and just a slight improvement, which may be a doubt discoveries will be made, and just a slight improvement, which may be a doubt discoveries will be made, and just a slight improvement.

restly, will reams are in virgin ground of great promises, and by oeing developed voting? The ends are in virgin ground of great promises, and by oeing developed voting the statistic or the sta

the 10 acts of lead per fathom.

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10 exts of lead per fathom.

11 exts of lead per fathom.

12 exts of lighburrow, is worth for tin 28t, per fathom, and in this level, west of leats the lode is worth 18t, per fathom.—Doctor's Blatt: The lode in the winze shring below the shallow adit level, east of shaft, is worth 8t, per fathom for shipper. We have about 4 fms. more to sink to communicate to the deep adit, ones we shall be able to set three tribute pithes on copper. Baturday next being were year and setting day a full report shall be sent you. Baturday next being wor pay and setting day a full report shall be sent you. Baturday next being work as the shall be sent you. Baturday next being arrived and the sent you have been going the shall be sent you. Good progress is still being made in sinking the engine shalt. We shall be taking down the lode in the field again the latter part of next week. We sampled to-day two parcels of silected or, No. 1 computed at 20 tons, No. 2 at 10 tons, for sale to morrow week. PARTS MOUNTAIN.—T. Mitchell, July 27: The ground in the 80 cross out eath still looks promising. We are frequently meeting with small strings of sulphur and copper. I enclose you small specimen of rich copper ore, which has just be broken from a small flookan joint, running across the ground in the middle of the forebreast, which is another evidence of the ground being alive for mineral this direction. I have nothing new to report at any other point of operation. It will be our setting day on Saturday next.

PARELEY BRIDGE.—O. Williams, July 27: Lumb Vein: Since my last letter we have opened 3 ft. further into this vein, making its total width 18 ft. We have also diven 3 cubic fathoms on its course, and obtained from it 6 tons of lead or, making a produce of 2 tons of ore per cubic fathom, or equal in value to 75t. in width, composed of goosan, quartz, blende, and lead ors, yelding of the latter ton per fathom. The stope without change. The sinking of

nan unrel on regularly.

PEDN-AN-DREA UNITED.—W. Tregay, July 22: There is nothing particular
communicate, everything being carried on as last reported to you, and without

ping carried on regularly.

PEDNAN-DREA UNITED.—W. Tregay, July 22: There is nothing particular to communicate, everything being carried on as last reported to you, and without math clause.

PENANSP BARYTES AND LEAD.—July 27: In the 80 yard level, east of the engine shaft, the lode has a very favourable appearance for an immediate imperement. There is a well-defined footwall, and water coming treely from the footwall foo

est is producing 15 cwts. lead ore per fathom.—Tribute bepartment: The eleven piches are yielding fair quantities of lead, and the men getting wages in their respective prices.

PENSTRUTHAL.—W. Teague, July 24: In the Highburrow shaft, sinking under the 35, the lole is disordered by means of a patch of elvan crossing the same, which is only temporary. In the 58, driving east of shaft, the lode is worth for copper ore 18t, per fathom. In the 58, driving west of shaft, the lode is worth for copper ore 18t, per fathom. In this level 1 expect an improvement shortly. In the 48, driving east of shaft, the lode is worth for the 48, driving east of shaft, the lode is worth for tin 64, per fathom. In the 48, driving west of shaft, the lode is worth for tin 64, per fathom. In the 48, driving west of shaft, the lode is worth for tin 65, per fathom. In the 48, driving west of shaft, the lode is worth for tin 64, per fathom. In the 64, driving west of shaft, the lode is worth for tin 65, per fathom. In the 64, driving west of shaft, the lode is worth for tin 65, per fathom. In the 65, and the fath of the f

ther change. RHEIDOL.—J. Ridge, July 22: The lode in the rise in back of adit level will all 1/5 ton of blende per fathors. We have commenced grating and picking wer the stuff on upper floors. I shallbe able in my next to say how it turns out. he new wheel for cole rack machine is made will be fixed in its place on Moon ay. We are getting on well with repairing the machinery on lower floors. I topotoget the jigging-machine connected to crusher wheel about the end of ext week.

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GRAVELS.—A. Waters, July 27: The 95, north of old shaft cross-cut,
worth 5 from per fathom. The 95, south of ditto, is worth 3% tons per fathom;
is latter and is MAN GRAVELS.—A. Waters, July 97: The 95, north of old shaft cross-cut, orth 3tons per fathom. The 95, south of ditto, is worth 3½ tons per fathom; latter end is now within 77 ft. of meeting the drivage north from new engine, t, and I expect to hole next week. It would appear that the lode at and about slatts in two parts, and that we shall have yet to cross-cut west of said shaft and the main and richest part of the Roman vein. This is an important matable I look upon it as a great feature considered in connection with depth, part of the lode being carried in the 80, south of Wilks's winze, is worth 5 tons atthem. The hanging wall part of the lode, in the 65, south of 81oke's winze, atth 3½ tons per fathom; the iode here altogether is over 12 ft. wide, there as course of lead ore on the footwall worth 2 tons per fathom, in addition to mentioned above on the hanging side. The winzes and stopes in the mine use to yield ore as for some time past. Surface work is going on as usual. DOKHOPE.—J. Blenkiron, July 26: I was at the above mines on Monday and aday last. On account of rope breaking (winding being stopped), and the men ged in hay harvest, we have arranged to stop most of the underground work to weeks, or until next pay, and in the meantime get guides and cage fixed, pit head gear, &c., completed. I trust we shall be able to get mest, if not all, is work done by the next also in the state of the s

engage in hay harvest, we have arranged to stop most of the underground work, inga two weeks, or until next pay, and in the meantime get guides and cage fixed, and pit head gear, &c., completed. I trust we shall be able to get most, if not all, of this work done by the pay, also in the meantime keep the dressing floors employed; this can be done by drawing to surface a quantity of work from the 15 with the present appliances. Another advantage gained by stopping the workings a short time—we have several places filled with bonse, or orestuff, which we cannot get out and keep the 42 going, but by laying off a fortnight we shall get somewhat card out. We have laid off 25 men (inside work), four or five of whom may be wasted ocasionally to assist in outside operations, &c. We have arranged for some secondhand steel-rope, for guides, &c., from the Weardale Iron Company, who have a quantity on hand. I think guides, eage, and fixing will not cost us more than 25t. We find the pitwork in the shaft, &c., in a much worse condition has we expected, but will lose no time in winding than can possibly be avoided. Estimated vaiue of the workings on measuring day—Four men in the back of the 3th (driven last month), stoping at 35s., worth 2½ tons per fathorn. Four men is the task of the 15, so at 26s, per fathorn, worth 1 ton per fathorn. Four men in the back of the 15, worth 16 cwts. per fathorn; stopped. Four men in the back of the 15, worth 16 cwts, per fathorn; stopped. Four men in the back of the 15, worth 16 cwts, per fathorn; stopped. We have stopped log: aloped. Nine men in the 23 at 90s, per fathorn; stopped. We have stopped log: aloped. Nine men in the 24 at 90s, per fathorn; stopped. We have stopped log: aloped. We have stopped the 42 slow as the price now paid; we shall drive on by month contracts after next pay. We have four men making air course from a water-back of the 15 which we intend completing by the pay. Most of the ore now in the last of the 14 cmt. The forebreastas now standing will about half pay be cast

Front, ST. PATRICK.—Wm. Francis, July 28: It gives me much satisfaction to report that the crey ground on the east and west joint going down on the junction of the

cross-course continues to improve in sinking below the 120 yard level, and the appearances are must encouraging. The cross-course in driving the 90 yard cross-cut north is at present plached up, and the ground is not so easy for driving. The 60 yard cross-cut in the chert still preserves all its favourable indications, and the progress is rapid and satisfactory.

80 UTH CARN BREA.—William Rich, James Knotwell, July 26: Owing to the gudgeon of the beam of the pumping-engine breaking, and having had to put in a new balance-bob, there has been very little done in the bottom of the mine during the past few days. We have put in the new gudgeon, and the mine is nearly drained to bottom. The lode in the 164 west is about 2½ ft. wide, regular, and well defined, composed of fluor-spar and stones of copper. The 164 cast is letting out water freely, and carries a little ore. There is nothing new to report on in the 164 cross-cut south. The stope in the bottom of the 150 cast is worth 102. per fm. The lode in the back of this level is worth 82, per fathom. SOUTH CONDURROW.—W. Rich, W. Williams, H. Abraham, July 25: We have made a communication between the 93 and the 82 fm. levels, which has given good ventilation, and opened ground for stoping. The 93 end west is worth 102, per fathom. We have resumed driving the 82 cast; the lode is worth 102, per fathom. The winze in the bottom of the 82 is worth 122, per fathom. The ground is moderately easy in the 82 west. We are driving by the side of the lode. The rise in the back of the 70 west is being urged on to met the winze below the 69. The lode in the 69 west is worth 82, per fathom. The winze below the 69. The lode in the BARREN.—J. Boundy, July 25: Having had to put in a new working

The loade in the 60 west is worth 18 per fathom. The wince in the 60 east is worth a SCITIEL MAREEN —J. Boundy, July 25. Having had to put in a new working harrel in our top lift before the winter sets in caused the pumping-wheel to be idle for several hours, consequently we could not measure the shaft on Starticaly safe, consequently we would not measure the shaft on Starticaly safe, per fathom; the lode at this point has very much improved since last report, now worth for lead and copper about 22. Per fathom; with every appearance of further loads over the 60 west, by four men, at 85s, per fathom; the lode is 12, fix wide, worth 13. Per fathom; the lode is 27s, with the lode is 12 ft. wide, worth 14 per fathom; the lode is 28s, the lode of the loads over the 60 west, by four men, at 80s, per fathom; the lode is 42s, fix wide, worth 14 per fathom; the lode is 14s, wide, and has improved both in appearance and value, now worth 23s, per fathom. The wince below working. To stope the back over the 80, by cour men, at 80s, per fathom; the lode is 15s, wide, and has improved both in appearance and value, now worth 23s, per fathom. The per fathom is the lode is 15s, wide, worth 140s, per fathom; the lode is 15s, wide, and has improved both in appearance and value, now worth 23s, per fathom. The per fathom is the lode is 15s, wide, and the lode is 15s, wide lode is 15s, wide is 15s, wide lode is 15s, wide l

wine, worth 22. See per fathom, producing tin. In vide, worth 52, per fathom. In the 40, stoping the bottom east, by six man, at 22. Iss. per fan, the lode is 2 ft. 6 in. wide, worth 53, per fathom. To stope the back of the 30 fathom level east, by two men, at 14. 10s, per fathom; To stope the back of the 30 fathom level east, by two men, at 14. 10s, per fathom; the lode is 3 ft. wide, and worth 42. 10s, per fathom; the lode is 3 ft. wide, and worth 44. 10s, per fathom; the lode is small. The middle adit is driving west, by four men, at 32. 10s, per fathom; the lode is 1ft. wide, producing low-price tinsuff.—Caunter: We have two men stoping the back of the 60 south, at 10s, in 14.; the lode is 3 ft. wide, and worth 54. per fathom for tin. Two men are stoping the back of the 50 west, on Pink lode, at 10s. in 14.; the lode is 18 in. wide, worth 54. per fathom. The two foregoing are at a standard of 424. per ton for the tin. We have two men stripping the sides of the 60 west, and two men stripping the sides of the 60 west, and two men stripping the sides of the 60 west, and two men stripping the sides of the 60 west, and two men stripping the sides of the 60 west, and two men stripping the sides of the 60 cast, on Wilson's lode. Our steam stamps work very well, and our pitwork and machinery throughout the mine is in good working order.

WEST MARIA AND FORTESCUE CONSOLS.—W. Skewis, July 26; West Maria Lode: The lode in the 104, east of Willesford's shaft, is 4 ft. wide, composed of capel, quartz, and occasional stones of copper ore; looking kindly for improvement. The caunter lode, at the 93 fm. level west, is not quite so large as when last reported on, but is still carrying a leader of copper ore.—North Lode: In the 71 west the lode is 2½ ft. wide, worth for copper and mundie 84. per fathom. The other bargains and pitches are looking much the same.

WEST MILWR.—W. Francis, July 26: The joints and feeders which are still being met with in driving the 70 yard level cross-cut south, towards the Milwr veln, confirm m

the cross-cut north, in the 42 is one of the Golden Fleece veins, and is fully 2 feet wide, yielding patches of ore, and is primising for an early improvement. The level from bottom of No. 2 shaft is extended east upon the lode 4 fathoms; in the forebreast we have just cut into a cross-course 8 in. wide, filled with gossan and lead ore of good quality.

WEST TANKERVILLE.—Arthur Waters, July 27: This mine continues to make progress, and there is a fair prospect of our beig gable to increase the lead returns after next sampling. The said sampling will contain 30 tons of lead and 20 tons of blende. We are very short of water for the purposes of the winding-engine: in fact, can only draw stuff every other day or so in corsequence.

WEST WHEAL TOLGUS.—July 26: We hope to be able to continue the slnk-ina of Taylor's shaft below the 135 without much interruption. The lifts are fixed, and everything in the shaft appears to be in good working order. The lode in the 135 end west is 4ft. wide, yielding 1 ton of ore per fathom; the end is just under No. 1 winze, we shall not expect much change in the lode until it passes under the winze, it will then be getting under a fine run of ore. We have set No. 2 winze to sink, it is down 7 tms. below the 125, in a good lode of ore yielding 16 tons of ore per fathom; we shall not be able to sink much deeper before getting down to water. The lode in the 125 end west is 2 ft. wide, kindly, although poor. The 115 west lode is still poor. The 105 end has been discontinued for the time; we thought it the safest course to do in order to keep down the cost, until we get something better in the other ends. The 55 end has not been set, as we shall require more air to extend the end on towards Richard's shaft; it will be necessary to stope the back to make room for the pipes, and as the lode is toleaghly orey it will answer the purpose of making room for pipes, and prove the lode at the same time. After this month we hope to resume the driving of the end again. The great lode in the 85 and 75

itself is all that we can look for, except the absence of much orc. We shill nope to get the orc.

WHEAL CREBOR.—J. Andrews, July 25: The ground in the 120 cross-cut south is easier for driving, which looks as if we are near the lode. In the 108 east we are driving by the side of the lode. The lode in the 72 east continues large and promising, but unproductive. In the 48 east we are carrying 9 ft. of the north part of the lode, which yields a little copper ore and mundic, but not enough to value. The two stopes in the back of the 48 are worth 30l. and 15l. per fathom respectively.

WHEAL KITTY (St. Agnes).—Stephen Davey, Richard Harris, July 22: We have no change to report. The men in the various bargains throughout the event and desning the lode.

have no change to report. The men in the various bargains throughout the mine are desuing the lode.

WHEAL UNY.—Wm. Rich, M. Rogers, W. Bennetts, July 22: The rise in the back of the 160 west is progressing favourably. We have fixed cistern at the 150, at Hind's engine-shaft, preparatory to fixing the new pitwork. The 150 end, west of incline shaft, is worth 112, per fathom. There is an increase of water in the 150 cross cut, north of Goodinge's shaft; it appears as if we are getting near the lode. The 140, east of King's, is worth 102 per fathom. The 120 cast is worth 82 per fathom. The rise in the back of this level is worth 82, per fathom. The 110 end east is worth 102 per fathom. We meet with small branches containing tin in the 100 cross-cut north.

THE VAN MINES-MONTHLY REPORT.

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July 26.—As under, please find my monthly report and setting list:—The 105 west is driven 13½ fms.; we have now set to six men to cross-cut through the lode, at 200s, per fathorn. We have put a pare of men to cut the lodge at the engine-shaft at the 105. The 90 is extended 40 fms. east of shaft; this end is for the present only suppended, and the men set to cross cut north to prove the width and value of the lode at the present end; set to six men, at 250s, per fathorn. The same level west of shaft is driving upon the main leader, and is worth for lead ore 60%, per cubic fathom; set to six men, at 250s, per fathom. The stripping of the lode to the full width in the side of this level, west of shaft, is set to eight men, at 80s.; worth for lead ore 31% per cubic fathom. We have set a pare of men to cross-cut south at point about 30 fms. west of shaft in the side of the 90, in order to prepare for sinking a winze to the 10s at that point; set to six men, at 200s, per fathom. The 75, west of shaft, is set to six men, at 240s, per fathom; worth for lead ore 610s, per cubic fathom. The same level, driving west of the 90 cross-cut, is set to six men, at 200s, per fathom; worth for lead ore 70%, per cubic fathom. The winze sinking below this level, at a point 55 fms. west of shaft, is down 3½ fms.; set to six men, at 1.0s, per fathom; worth for lead ore 70%, per cubic fathom. The winze sinking below this level, at a point 55 fms. west of shaft, is own 3½ fms.; set to six men, at 1.0s, per fathom. The add ore 50%, per cubic fathom. The ore 150%, per cubic fathom. The same at a point about 60 fms. west of shaft is set to eight men, at 80s, per fathom; worth for lead ore 50%, per cubic fathom. The add ore 50%, per cubic fathom. The add ore 50%, per cubic fathom. The same at a point about 60 fms. west of shaft, is set to eight men, at 60s, per fathom; the 30 ditto, to eight men, at 70s, per fathom; the 10 ditto, to eight men, at 80s, per fathom; the 20 ditto, to eight men, at 70s, per per cu

FAILURE OF THE COPPER MINERS' COMPANY.—It is with great regret we learn that a petition has been presented to the High Court of Justice to wind up the undertaking of the Governor and Company of Copper Mines in England—one of the oldest public companies in existence, the charter dating nearly 200 years back. The crisis now reached has been looked for some years, as it was evident from the published statements of accounts that the company has for a long time been in anything but a satisfactory funncial position. As creditors of the company, some Cornish mines will probably suffer—this company has been No. 6 on the Cornish Copper Ore Ticketing—although not to any large extent (estimated at 3004.) but this loss will be all the more severe from the fact that bad debts in the sale of copper or in ores are very unusual; in fact, a returned acceptance is a thing previously unheard of, and in the present instance it will cause no little commotion among mining companies. The system of payment by drafts at two months ought, some parties allege to be abolished. The ordinary risks of mining are enough, and ought not to be added to. Copper smelting companies are generally extremely rich, and it could make little or no difference to them whether they paid in cash or otherwise. The mines usually discount the tore bills, and 5 per core, per annuar might instas well be paid to one person as another. Mr. John Farren Peurose, of Parchenver, Reduruh, was the local cashier, and Mr. Thomas Angrove, of Mount Pleasant, Camborne, the assayer, and both these gentlemen are now rendering every service in their power. The company's operations extended to colleries, tin plate works ironworks, copper smelting, &c., employing between 2000 and 3000 hands, and paying in wages alone over 100,000, per annum. Last year the company's losser represented a sum of close upon 60,000., and this has been increasing rather than decreasing of late. We are glad, however, that every liability is likely to be paid in full, and that if the liquidator is success

full, and that if the liquidator is successful in realising there will be a surplus.

CHARLOTTE UNITED.—This sett is now being vigilantly worked by a highly respectable body of adventurers, 30 in number, chiefly Manchester gentlemen, under the management of Capt. Bennetts, of Penhalis, himself an able and trustworthy agent. The company is a limited one, in 6000 shares of 5l. each, equal to 30,000l, but it is resolved to call up at present 10,000l, only, and this sum—a tolerable one to begin with—is now available for the r-development of this once highly lucrative concern to the 100 fm. level. These setts are on the "Towan lands," owed by several lords, involving the necessity of eight separate deeds—a considerable, but perhaps needful, expense. At present they have only 20 or 30 hands employed sinking a new engine-shaft, paying about 100l. a month, but this will be increased twofold almost immediately. The engine from the late New Wheal Charlotte sett—a 36-in.—will be crected forthwith, under the charge of Mr. F. W. Michell, M. E. The engine-house is under contract to be finished within six weeks from July 24, at a contract price of 4s. 9d. per perch. The engine bast is already sunk 10 fms., which has taken about four months, and has been spare work. If Charlotte United turns out a prize the locality and shareholders will have to thank Mr. Elisha Tregellas for it, as he has been ineflatigable in inducing shareholders of capital to try their hand here, and we should indeed be glad if it turned up a trump card. About 10,000l. was expended here six years since since, but the works were stopped at a hand here, and we should indeed be glad if it turned up a trump card. About 10,000% was expended here six years since since, but the works were stopped at a time when there were several encouraging points to come off. The old men say that Ennor's lode will pay well for copper.

THE BORING MACHINE.—The difficulties in connection with this important machine for Cornish mining appear to be gradually giving way before the persevering energy of those who have the matter in hand. At Wheal Agar the last trial has shown a decided improvement in the results in favour of the machine. The plan adopted under the direction of Capt. Teague, jun, is the combining of hand-boring (when necessary) with machine-boring, which enables them to accomplish about twice as much as by hand labour alone. It appears that there is some difficulty at times in boring the holes in the proper direction by the machine; but by a judicious use of hand labour in boring a hole, an "advantage," as the miners say, is made for the machine. And in this way Capt. Teague has found that very satisfactory results have been obtained. There is no doubt but that the machine will ultimately prove a success in Cornwall as it has in other places; and all connected with mining cannot fail to be greatly benefited by it, and the working miner by no means the least so. As things are now, it is often found difficult to form what is termed a "pare" of men who are equally efficient, and the consequence is that the best men either do not exert themselves, or if they do the inferior men get the henefit of their superior skill. But with the successful use of the boring machine this would be rectified. The best men would take the contracts and superintend the working of the machines, and would thus get the full benefit of their superior ability; whilst the inferior men would be employed by these in clearing stuff, and work of that description, and would be paid for what they did and no more. We should then hear less about the emigration of our best men.—West Briton. THE BORING MACHINE.—The difficulties in connection with this

** With this week's Journal a Supplemental Shert is given which contains—Original Correspondence: Coal; the Welsh Slate Trade (T. Sykes); the Mining Company "Nederland"—the Caribou; Pacific Coast Mining Notes (J. D. Power): Blakeley Hall Colliery Company; Mining in Breage (R. Symons); New Ore-Dressing Inventions; Anomalies of Market Prices and Securities (R. Tredinnick): Bedford United Mines—Three Hunin Progressive Tin Mines—Sales of Copper Ores—Foreign Mines—Three Hundred Men Imprisoned in a Coal Mine—the Pulsometer Pump (libertrated)—Exports of Coal—Improved Salty-Lamp—Meetings of Grogwinton, Cook's Kitchen, West Frances, Aberdaunant, Birdseye Creek, Pestarena United, Cardiff and Swansea, and West Basset Companies, &c.

The Mining Market: Brices of Metals, Ores, &c.

METAL	MARKET-LO	NDON, JULY	28,	1876.

IRON.	English, ingot, f.o.b 78 0 0
"Scotch, all No.1 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Australian 73 10 0
Bars, Welsh, f.o.b, Wates 5 13 0 - 0 - 0 1	Australian 73 10 0
", In London, 6 12 6 - ", Stafford.", 7 15 0 - 9 15 (", in Tyne or Tees 6 9 0 - 6 5 (", Swedish, London11 15 0 - 12 5 (Rails, Welsh, at works 5 10 0 - Railway chairs	
" in Tyne or Tees 6 0 0 - 6 5 6 5 6 8 8 8 8 8 11 15 0 - 12 5 6 8 11 15 0 - 12 5 6 11 15 0 12 5 6 11 15 0 12 5 6 11 15 0 12 5 6 11 15 0 15 11 15 0 15 11 15 0 15 11 15 0 15 11 15 0 15 11 15	
, in Type of Fees 6 90-12 5 (Swedish, London 11 15 0-12 5 (Rails, Welsh, at works. 5 10 0-	Banca 73 10 0
Rails, Welsh, at works. 5 10 0-	
Railway chairs	COPPER,
Railway chairs	Tough cake and ingot. 78 0 0
enikes	Best selected 79 0 0
	Shoots and sheathing 83 0 0- 84 0 0
Showto Staff in London 9 15 0-10 0	First Pottome 87 0 0
Diston Staff in London 9 10 0-10 10 0	Wallance 77 10 0
Goone Staff 5 15 0-10 U	Burra or P.C.C 76 10 0
Nail rods, Staff. in Lon. 7 10 0- 8 0	Other brands 75 0 0
STEEL.	Chili bars, g.o.b 73 0 0
English, spring 14 0 0-23 0	The same of the sa
,, cast 25 0 0-45 0	
Swedish, keg18 0 0	
	Other alloys £120 0 0- 140 0 0
	BRASS.
LEAD. 00 5 0 00 10 /	997.
English, pig, common . 20 5 0-20 10 (Tubes 9 -12
" L.B20 10 0 W.B21 0 0-22 0	Sheets 834 -014
sheet and bar21 15 0-22 0	
ss sheet and par21 10 0-22 0 0	
pipe22 10 0-22 15 (red23 10 0-24 0 (Nails composition 81/4 -101/4
white	TIN-PLATES.* per box.
white	Charcoal, 1st quality 1 5 0- 1 6 0
panish	
	Coke, 1st quality 1 1 0
QUICKSILVER.	" 2nd quality 1 0 0
Flasks of 75 lbs., ware. 9 0 0	Black per ton 17 0 0 - 17 10 0
SPELTER.	Canada Staff on Cla)
Slesian or Rhenish 22 0 0-22 2 6	
English, Swansea 23 10 0-	
Sheet zinc 26 10 0- 27 0 (14 × 10
	x less for ordinary; 10s. per ton less for

Canada: IX 6s. per box more than IC quoted above, and add 6s. for each X. Terne-plates 2s. per box below tin-plates of similar brands.

REMARKS.-Our markets have been somewhat steadier, and, in REMARKS.—Our markets have been somewhat steadier, and, in some instances, a slight advance in prices effected. The change at present, however, is chiefly speculative, and, therefore, may cease at any moment. As soon as operators for the rise discontinue to give support to the market prices will no doubt again recede, as regular trade has not sufficiently recovered yet to warrant any particular advance. At the present time speculation should be discouraged, as it would be most detrimental to the permament revival of legitimate trade to have prices forced up too quickly. The best way to inspire confidence after such severe prostration is to preserve the utmost steadiness in prices, and prevent, if possible, unnecessary fluctuations occasioned by a few reckless speculators.

COPPER.—The market for this metal has undergone an improvement both for English and foreign, and higher prices have been

innecessary fluctuations occasioned by a few reckless speculators.

COPPER.—The market for this metal has undergone an improvement both for English and foreign, and higher prices have been established. Sales of Indian sheets have been effected as low as 814. 10s., since which smelters have realised higher rates for limited quantities, and the price now asked is 83t. to 84t., with few sellers at the former price. The Indian Exchange having recovered to some extent may cause a better demand for this description of copper than has existed for some time past. In Yellow Metal there has been comparatively little doing, as sellers in most instances were unable to meet buyers' limits. Sales of Australian have been made at gradually improved prices, 77t. 10s. having been paid for Waliaroo, and 76t. 10s. for Burra. In regard to Chili thars considerable business has been reported. Various prices have been realised, according to terms. Cash prompts are now about 73t.; prompts from two to three months 10s. to 20s. more. This improvement if chiefly owing to the operations of speculators, and prices have taken too sudden an upward turn to insure the stability of the market for any lengthened period.

As soon as recent speculators can turn over their purchases to a profitable account they will probably turn round quickly, and "bear" the market once more: consumers, therefore, should not play into the hands of speculators, but act cautiously under present circumstances, and wait until the demand from legitimate sources werrants the payment of higher prices. At any moment the speculative feeling might subside, and in that case a reaction would doubties quickly follow. The advices by the next mail from Valparaiso are looked forward to with much interest; and our market will be more influenced by the announcement of charters and the ruling rate of exchange than by the mere speculative transactions taking place at the present time in our market.

IRON.—The prolonged period of inaction is beginning to be seriously felt by others tha

present time in our market.

The prolonged period of inaction is beginning to be seriously felt by others than the working men and their families. They very generally been able to eke out a livelihood during spring and early summer months, and now some of them are looking forward to the harvestfield before long, the proceeds of which will, they hope, carry them on into the autumn. But the sufferers upon whom the stagnation of trade is now beginning to tell with significant force are the misters rather than the men. In the North of England a good deal of anxiety has been experienced regarding the stability of certain firms. Thomas Yaughan and Co. have have dided over their difficulties by forming a limited company, in which the creditors of the old concern have agreed to take payment of their demands in shares in the new company. This amalgumation has done something towards staying the excitement, but a good deal of fear and doubt is still entertained regarding the future. Sellers are very chary of making sales unless they can do so upon unusual terms, bytwhich they are well secured; and on the other hand, buyers are .ew, and the prices demanded are not such as to induce extended purchases. Makers cannot at the existing rate of wages and material lower their prices without realising a loss, and thus business done is of a very limited character. Natwithstanding every effort to keep stocks from accumulating, they are on the increase; but shipments to the Continent are fairly maintained. No. 1 pig-iron stands at about 49s.; No. 3, 48s.; No. 4 forge, 49s. In the finished iron trade there is no improvement. Orders are still extremely slow in coming forward, and there appears to be no prospect of any improvement. Quotations for manufactured iron remain very much unchanged, but it is hard to say whether, with the existing condition of trade, anything less than an extra-ordinary concession in price would bring about the much desired changs. That any such concession can now be made is a simple impossibility, and it would seem that the iron trade of the country is yet to pass througha severe crisis before such conditions shall be brought about as shall result in a satisfactory current of business. From South Wales and represe apring and early summer months, and now some of them are look-ing forward to the harvestfield before long, the proceeds of which

tion of hopeless insolvency. The operations of this company having a connected with iron and the plate works reveal the main causes of twitish have overtaken them, but had they devoted their attention to nest of the copper rather than the iron or tin plate department query would have succeeded any hetter.

lether they would have about 16 enquiry for pigs in the Rhymney district, but a demand does not seem to amount to much. The Statch pig iron market ring the past week has been tolerably steady; the price to-day of m.n. is s. 1054. to 57s., closing firm.

Week ending July 24, 1875

Week ending July 23, 1876

**Tone 11,282

**Week ending July 23, 1876

Decrease 4,011
Total decrease for 1875 61,333
LEAD.—This metal is improving, owing to supplies of English and Spanish pig coming forward in reduced quantities, but the demand is still very limited,
SPELTER.—Silesian has only fluctuated slightly, and business has been very limited.

SPELTER, -Siles

QUICKSILVER. - A further advance of 10s. per bottle has been paid, and sellers are now

rs are now firm at 9L per bottle, per bottle has been paid, The market has assume! a very unsettled appearance, and holders are putting forth aware affects. a though holders are putting forth every effort to sustain prices yet it is doubtful whether they can do so much longer, and buyers need be under no apprehension that prices will advance much beyond their present figure; but, on the other hand, it would not be surtheir present ngure; but, on the other same, it would not be sur-prising that prices in course of a little time will be considerably lower. Speculators may attempt to busy up the market fictitionaly, but unless the consumption increases or supplies fall off there is very little prospect of their turn-lar the market to their own advantage. On Wednesday the Dutch Trading Com-pany's public sale of about 30,000 slate of Banca tim was held, and the whole quan-

tity disposed of at an average of 43¼ fis., against 45½ fis. at the last sale. The consequence of such an announcement on this market was to produce lower prices, and 72% was Immediately accepted for Straits on the spot, and the same price also for July and Angust since show Billiton has been sold at 71½. Tos, ex ship in London Banca tin now having so much less value than before will necessarily bring it into greater competition with Straits and Australian, and the continental buyers will, no doubt, take mere Banca. The inducement to buy Straits or Australian in preference to Banca on account of difference in price no longer exists, and the only way to regain the former advantage will be to lower the price. Prices may be upheld till the close of the month with the object of squeezing the "bears," and during the last day or two holders have succeeded in running up the price 20s, to 50s, per ton, but unless deliveries have been going on larger than it is expected, and the stock is greatly reduced, there is no reason why enhanced rates should be paid. The market is a little excited and unsettled at the moment, and the opinion of the most impartial in the trade is that prices cannot advance unless the bona fide demand improves.

PLATES.—Orders are few in number, but it is stated that some works have sold fairly for America, but at such prices as leave but little profit. The works generally are barely employed two thirds time. The stoppage of Mr. Moggridge, tin-plate manufacturer, at Caerlon, has already been announced. His workmen are prepared to support him by submitting to a reduction of one-fourth of their wages for a period of three months, provided the works are started again. The future of this trade is involved in as much obscurity as that of other departments in the metal trade. The depression has been of very long continuance, and without the slightest alleviation.

THE IRON TRADE — (Griffiths's Weekly Report). — Friday Evening. The Glasgow market for Scotch pig-iron closes firm, with buyers for g.m.b. warrants at 57s., an advance on the price ruling this day week of 6d. per fon. We quote makers' No. 1 iron: — Gartsherie, 65s. 6d.; Coliness, 67s. 6d.; Calder, 65s.; Langon, 66s. 6d.; Summerlee, 60s.; Monkland, 57s. 6d.; Lo. Chalsgow; Glengarnock, 63s.; Eglinton, 57s. f.o.b. Ardrossan; Shotts, 66s. 6d. f.o.b. Leith; Kenniell, 58s. 6d. f.o.b. Boness. Our market continues quiet, without any excitement or indications of that great volume of demand for finished iron which tends to raise prices. There has been a fair business done this week on account of local engineers on the Thames and other parts of Loudou; these orders are invariably for Yorkshire and Staffordshire honse at full list rates. The demand for best boiler plates is not brisk, and our engineers seem more particular now than ever in selecting the highest Yorkshire and Staffordshire honse at full list rates. The demand for hoops and nail rods flags. Prices of both are weak. We have little change to notice in Scotch pig. To-days prices as above.

The tin-plate trade is unchanged, but the market is very sensitive; prices will certainly go no lower, but if the slightest activity in buying sets in the value of tin plates must advance. The general iron trade is very unsatisfactory. The unprofitable state of the trade, however, is not confined to this country. Germany, Belgium, and the United States are suffering from the present low prices very severely. The only consolation we can offer at present is the face that with our superabundance of gold we shall get to the bottom of prices soon, and then, but not till then, prices will gradually improve. We regret to have to announce further difficulties in the Cleveland district this week. With regard to the large failure mentioned last week, the creditors have held another meeting in York, which was adjourned to afford time tore construct this great concern under the Limited L

Messrs, Sanford and Bird.—Copper: A considerable business has been during the last week in Chili bars at the low prices ruling, and the market cle with a decidedly better tone.—Tiv: The Banca sale of 29,0 0 slabs this day alised equal to 73. 10s. fail down here. The market has been steady during week at 73. 10s. for Straits and Australian.—Tix-Plates remain steady, and some cases an advanced in price has been obtained.—Lead keeps firm.—Qui silver has advanced to 9t. per bottle.—Antimony: Dull.

The MINING SHARE MARKET has been rather more active this week, though the settlement of the fortnightly account has some what interfered with general business.

The mines dealt in have included Tankerville, West Tankerville,

The mines dealt in have included Tankerville, West Tankerville, Roman Gravels, East Van, Parys Mountain, Glyn, Great Laxey, Glenroy, Rookhope, Prince of Wales, Pennerley, Penstruthal, North Laxey, and a few others. The Banca sale of tin has not gone off so well as expected, and the price realised is lower than that of the last sale. At the present sale, however, all the tin offered (29,900 slabs) were sold, while at the previous sale a large quantity remained unsold. The price now realised is equal to 73l, per ton in London. Tin mines have been flat, and in one or two heavy calls have been made.

made.

Cook's Kitchen shares have fallen to 2½, 3; at the meeting, on Thursday, a call of 7s. 6d. per share was made. The loss on three months working was 927l., and the debit balance 1956l. The costs, so far as charged up, were 3202l. West Frances, 6 to 6½; at the meeting here a call of 10s. per share was made. The accounts showed a loss on the quarter of 474l., and a debit balance of 2023l. The costs for the quarter were 3234l. Carn Brea, 35 to 37½; Dicooth, 32½ to 35; Tincroft, 18 to 19; West Basset, 4½ to 5; at the meeting the accounts for three months showed a balance against the mine of 752l. The copper ore sold realised 585l, 4s. 9d.; black tin (155 tons), 6536l. The costs for three months amounted to 7874l. West Poldice, 11 to 13; at the meeting, on July 18, the accounts showed a profit of 491l, on five months' working. A dividend of 5s. pershare was declared. The prospects are considered very promising for opening out a good mine.

r opening out a good mine.
East Van shares have been weaker and fluctuating, and leave off 71 to 8; an extraordinary general meeting has been called for Aug. 1. to pass special resolutions for increasing the capital of the company from 75,000l. to 90,000l. by the creation of 3000 shares of 5l. each, only 1500 of which are to be issued without the sanction of the shareholders. The agent writes, referring to the satisfactory results of cutting the lode rich at cross-cut A, that although not so fortunate in the other two cross-cuts, still the indications at these points lead him to believe that a productive lode will be found in depth, and his candid opinion is that East Van will make a lusting and profitable mine. In openining out the lode east of A cross-cut it is worth 30l, per fathom. Van, 36 to $37\frac{1}{2}$. Minera, 18 to 20; the mine continues to improve in the deepest western level. Van Consols, $1\frac{5}{2}$ to $1\frac{1}{3}$; Glyn, $3\frac{3}{2}$ to 4. Tankerville shares have been rather largely dealt in at 10 to $10\frac{1}{2}$; the sampling for the month is 150 tons of lead ore. Roman Grayels rather freely offered at 14 to $14\frac{1}{2}$ Great of lead ore. Roman Gravels rather freely offered at 14 to 14. Great

of lead ore. Roman Gravels rather freely offered at 14 to 14½. Great Laxey, 17½ to 18½; North Laxey, ½ to 1.
Cathedral, New, 1½ to 1½; East Pool, 12 to 13; Great West Van, ½ to 1½; Herodsfoot, 3½ to 4; Marke Valley, 1½ to 1½; Ladywell, 1½ to 1½; Pennerley, 1½ to 1½. Parys Mountain, ½ to ½; no change here this week. Penstruthal, 15s. to 17a, 6d.; Plynlimmon, 1½ to 1½; West Assheton, 1½ to 1½; Assheton, 1½ to 1½; Pateley Bridge, 3½ to 4½, and enquired for. Prince of Wales, 5s. to 6s.; the 45 east has improved to 10t. per fathom. The 65 declined to 10t. per fm. South Caradon, 110 to 120. Lovell, ½ to 1; an improvement has taken place in the 30 end east, where for some time past the lode has been hard and unproductive, but is now 6 ft. wide, and worth 15t. per fathom for tin, with every appearance of becoming a large 15t. per fathom for tin, with every appearance of becoming a large and rich lode. Devon Great Consols, 2½ to 3; the points in operation reported upon this week are worth in the aggregate 97L per fathom. South Condurrow, 4 to 4½; Unity Wood, 27s, 6d. to 32s, 6d.; West Craven Moor, 10 to 11; West Chiverton, 16½ to 17½.

rathom. South Conductow, 4 to 43, thirty wood, 27s, 6d. to 32s, 6d.; West Crayen Moor, 10 to 11; West Chiverton, 163 to 17½.

New Rosewarne, 10s. to 15s.; the adjourned meeting was only attended by two shareholders, and was again adjourned for a fortinght to have an inspection made of the copper lode, and the desirability of sinking Rule's shafts in the centre of the ore ground to the 67 level, which can be done in four months, at a cost of 125t. per month. Though worked at a great disadvantage from a distant shaft, this ground has lately produced ore to the value of 800L, and in the bottom of the 67 the ore ground is 20 fathoms long. This is ordinary times would be a fine speculation in itself, and if the shareholders generally do not wish to spend more money the mine will be offered in one lot as a going concern. The cost of last month was 190L; returns, 100L. Phenix; at the meeting here the accounts showed a loss on four months working of 230L; the tin sold realised 6057L; copper ores, 1447L; costs, 8400L. West Seton, 45 to 50. anch weaked at a great disadvantage

New Quebrada, 4 to 4½; Panulcillo, 1½ to 1½; Richmond, 8½ to 9

The Market for Mine Shares on the Stock Exchange during the

San Pedro, 14 to 14.

The Market for Mine Shares on the Stock Exchange during the week has exhibited a firmer tone, and there has been more enough for the better description of shares.

St. John del Rey, 330 to 350; the latest telegram received state the profit for June to be 7000!. The produce for the first elemant the profit for June to be 7000!. The produce for the sixt elemant the rate of 71 cits, per ton.

Australian Mining, 1½ to 2; the rentals, &c., received by the content of the sixt of the value of 4940!, the yield being at the rate of 71 cits, per ton.

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Australian Mining, 1½ to 2; the rentals, &c., received by the content of the value of 4940!, the yield being at the rate of 71 cits, per ton.

A dividend of 12 cits, and the company's property, but the executive express their willingness to deal liberally with any persons who may be willing to enter upon mining enterprise them. A dividend of 2s, 6d. per share will be paid on Aug. 1. The company's colonial agent is at present in Philadelphia as one of the representatives of South Australia. Mr. G. F. Cleland is acting in his absence. The directors hope Mr. Davenport will visit the country on his way back to the colony.

Richmond, 8¾ to 9½. The telegram received gives the week's mat \$63,000. The refining this week has produced doré bars to the value of \$32,000. The manager reports the cutting out for the 900 feet station preparatory to starting the drift from that level. If the ore struck at the 800 feet level is the main lode that from the test under the state of the south of the s

Argentine, 5\frac{3}{2} to 6\frac{1}{2}; there has been considerable business in the shareholders have so long manifested.

Argentine, 5\frac{3}{2} to 6\frac{1}{2}; there has been considerable business in the shares during the week. A vices are expected by the mail due on Monday next. From the latest accounts the works are proceeding satisfactorily. Condes, 5\frac{3}{2} to 6\frac{1}{2}; active preparations are being made for the resumption of work in the beginning of September both in smelting at Corral Quemada, and also in shipping the ores.

The market for Hydraulic, or Gold Washing, shares, continues quiet; and lprices are mostly unchanged. The various companies report their operations in full work, though water is getting scarcer, and local papers speak of the rapid exhaustion of snow in the mountains. The reservoirs belonging to the principal dicknowners are, however, full to overflowing, and supplies from these will carry washing along for a considerable time yet. Birdeye Creek, \frac{8}{2} to \frac{1}{2}; at the meeting reported in another column, the directors expressed regret that the position of the concern was no contents that of the total contents that the contents are the concern was no contents. rectors expressed regret that the position of the concern was no better; but it was explained that affairs were now looking brighter. 2092, profit having been realised during the present year. The directors promised that if the company continued in its present on dition their fees for the current year should be reduced. From the statements made it would appear that the future prospects are exceedingly good, and that the great extent of auriferous grared owned by the company gives assurance that many years must elapse before it can be exhausted. Blue Teat, 3 to 3; operation here are progressing as usual. The necessary works was in the progressing as usual. elapse before it can be exhausted. Blue Tent, 3 to 3½; operation here are progressing as usual. The necessary work required to open a good face on the South Yuba bank is being pushed forward with all speed. The ditch is bringing in a good supply of water. Celar Creek, ½ to ½; the superintendent, Colonel Ludlam, is pushing everything forward with the utmost energy, and is making capital progress in running the Yankee Tunnel. He has also commenced sinking the Baker shaft. A letter from him will be found? sinking the Baker shaft. A letter from him will be found in another column. Sweetland Creek, \(\frac{1}{3}\) to \(\frac{1}{4}\); as will be seen from the reportin another column, Mr. McLean is washing steadily; but he does not apparently think the run will yield much profit. The principal dealings in British lead mines have been in Van, Roman Gravels, East Van, Pennerley, Tankerville, and some others. Van, 36 to 38; the mine is looking as well as ever, and the usual monthly report apparent in another column. At the four-weakle sale

Van, 36 to 38; the mine is looking as well as ever, and the usud monthly report appears in another column. At the four-weekly sile on Thursday 500 tons lead and 200 tons blende realised 7665l. Cwm Dwyfor, I to 1½; Stewart's shaft in now down8 fms. I ft. below the 10, and the appearance of the lode at this point is favourable. Grogwinion, 6 to 7 (cum div.); since the half-yearly meeting on July 21, reported in another column, advices have been received stating that there has been a further improvement in the No. 4 lode at the 24 fm. level, and also in the No. 1 lode in the 6ld workings. Llanidloes, 3 to 3½; the shaft is down to the 72, and new level has been commenced driving east towards the ore ground. St. Harmon, 3½ to 3½; all points of operation are being pushed on as rapidly as possible. During the week the 67 east has much improved, and is yielding nice ore. Other points looking well. Wys Valley, 6½ to 7½; a parcel of 60 tons of lead for four weeks working has been sampled for sale on August 5; this is an increase of 50 per cent. in quantity, the monthly sales having hitherto been 60 50 per cent, in quantity, the monthly sales having hitherto been \$0\$ tons. There is a further improvement at the 22 east, and also in the new discovery at the adit. West Wye Valley, 3\frac{1}{2} to 4\frac{1}{2}; then in the new discovery at the adit. West wye valley, of to 4; uses is now ample water to drive the wheels, the mine is in fork to bottom, and the works are in full swing. Pennerley, 1\(\frac{1}{6}\) to 1\(\frac{1}{6}\); the lode in the 130 east is promising improvement. The ground in the 120 east is more favourable, and the agent considers that an improvement may shortly be expected. At Potter's pit the lode in the various drivings is turning out very well, and produces a good quantity of lead. The very dry weather to some extent interferes with dressing.

Pateley Bridge, 33 to 41; the Lumb vein has further improved, and is opening out in a most satisfactory manner, now 18 ft. wide, and worth? 75t. per fathom. Fielding's vein are worth 1 ton of lead ore per fathom. Dressing and smelting are progressing regularly. No other change. West Pateley Bridge, 5 to 51; the lode in the near leave in the contraction. ore per fathom. Dressing and smelting are progressing regularly. No other change. West Pateley Bridge, 5 to 5½; the lode in the new level is carrying spots of lead, and letting out a large quantity. The lode in the north cross-cut from the 42 is very proof water. of water. The hold the hold the restaurable to the missing for an early improvement, now yielding stones of Other parts of the mine also opening out encouragingly.

Other parts of the mine also opening out encouragingly. Subjoined are the closing quotations:—

Assheton, ¾ to 1; Carn Brea, 38 to 38; Devon Great Consols, 2½ to 3; Dolcouth, 34 to 136; East Caradon, 1 to 1½; East Vun, 7½ to 8½; 61½; Objointh, 34 to 36; East Caradon, 1 to 1½; East Vun, 7½ to 8½; 61½; 5½ to 3½; 45 to 3½; Great West Van, 13-61½; bits, 5; Great Laxe, 17 to 18; Binates Down, ½ to ½; Marke Valley, 1½ to 1½; Parys Mountain, 14s. to 16s.; Paleig Bridge, 3½ to 14½; Pennerley, 1½ to 1½; Penstruthal, 14s. to 16s; Bonus Gravels, 13½ to 14½; Penstruthal, 14s. to 16s; Bonus Gravels, 13½ to 14½; Marke Valley, 1½ to 15½; Tincroft, 17 to 18; Van, 5½ to 10½; Van Consols, 1½ to 1½; Argentine, 5½ to 6½; Birdseye Creek, ½ to 1½; Almada and Tirito, 1½ to 1½; Argentine, 5½ to 6½; Birdseye Creek, ½ to 1½; Almada and Tirito, 1½ to 1½; Argentine, 5½ to 6½; Birdseye Creek, ½ to 1½; Chondaes, ½ to 3½; Chordsen, 3½ to 3½; Chordsen, 3½; 3½

will be offered in one lot as a going concern. The cost of last month was 1901; returns, 1001. Phoenix; at the meeting here the accounts showed a loss on four months working of 2301; the tin sold realised 60571; copper ores, 14171; costs, 84001. West Seton, 45 to 50.

West Tankerville, 1½ to 1½; West Tolgus, 50 to 52½; Wheal Agar, 2½ to 2½; Wheal Crebor, 2½ to 3; Wheal Grenville, ½ to 1; Wheal Kitty (St. Agnes), 2 to 2½; Wheal Uny, 1 to 1½; Pennant, 5 to 5½. Rookhope, § to ½; the points in operation are producing nearly 7 tons of lead ore per per fathom. Ore sold on the 26th 25 tons, at 122. 1s. per ton. New Consols, 22s. 64. to 27s. 61.; the gross sales here, we understand, will be about 35002, per month, and leave good profits. The company now refines its own arsenic, of which it makes about 130 tons per month.

Argentine, 5½ to 6½; Condes, 5½ to 6½; Chontales, ½ to ½; Emma, 2 to ½. Frontino and Bolivia, 2¾ to 2½; the profit for the month of May is 10412, and the mines are reported upon as looking well. Eberhard; and Aurora, 8½ to 8½; Flagstaff, 1½ to 2; Javali, 65. to 7s.; COLLIERIES.—The market in these shares still continues dull;

JULY ! HALIFAX list:—Halifa: 29%: Halifa John Crossle: Bradford Bri Jon Comi

> The dire are inviting PERPETU. 4 per cent rent of 33, all prior c. and Midland Railway for of Parliame The TR 16,500l., a

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dull; ouse timmere than a very gradual improvement in the price of colliery shares, but dimere than a very gradual improvement sets in—which is likely to be soon, as we by a more decided upward movement sets in—which is likely to be soon, as we grad the decided upward with the present low prices will realise handsome profits read the devardage of the present low prices will realise handsome profits the present of the present low prices will realise handsome profits dispute at Edmund's and the Swaithe Main Collieries has been at last settled, dispute at Edmund's and the Swaithe Main Collieries has been at last settled, dispute at Edmund's more than three months. The men have, of dragging through a period for the profit of the profit of

HAHFAX.—July 23: The following quotations are from Mr. J. H. Thackrah's Hallfax and Haddersfield Union Bank, 29%; Hallfax Joint-Stock Bank, 29%; Hallfax Commercial Bank, 25%; London and Yorkshive Bank, 27%. 6d.; 29%; Hallfax Commercial Bank, 25%; London and Yorkshive Bank, 27%. 6d.; 30 no cossely 8, 12%; M. A. 20%; ditto, B. 7; Charlestown Brick and Tile, 10; Rip Bank 200; Ripsile Commercial, 11½; Helden Bridge Cotton, 10; Yorkshire Boiler Insurance Company, 228. 6d.; Norton Brothers, 7%.

The directors of the SOMERSET AND DORSET RAILWAY COMPANY are inviting subscriptions at par for 142,764. (being part of a total are inviting subscriptions at par for 142,764. (being part of a total are inviting subscriptions at par for 142,764. (being part of a total are inviting subscriptions at part for 142,764. (being part of a total sum of 168,000.—the remainder is already issued) Five per Crent. The remainder is payable from Nov. 1, 1878, out of the fixed and for the fixed are to 33,308. a-year (which is sufficient to cover such interest and all prior charges), guaranteed by the London and South-Western and Middand Railway Companies, under their lease of the Somerset and Dorset Railway for a term of 909 years, confirmed by an Act passed in the present Seasion and Frailment. The remaining 1 per cent. will accure and be payable when the goos receipts of the line amount to 66. per mile per week. The average gross receipts of the railway in Great Britain exceed 78. per mile per week. Interest represent the part of the part

of finise to be deposited for that purpose with Aussirs, Robarts, Ludobock, and to the first pryment of interest will be made in January next. The prospectus will be found in another column.

The TREGARDOCK UNITED MINING ASSOCIATION, with a capital of 60,000l., in shares of 2l. each, has been formed to purchase for 16,000l., in shares, the Tregardock, King Arthur, and Bossiney miss, in North Cornwall. The prospectus states that large sums of more have been expended upon the Tregardock property, and a nery considerable amount of work has been done. Four shafts have very considerable amount of work has been done. Four shafts have been sunk, and levels driven many hundred fathoms in extent. Breelds, averaging from 2½ to 5 ft. in width, have been opened up and worked upon. The main level is unusually right in silver lead ore. These lodes form junctions inland with the chother; a most important feature both for richness of produce and economy in working. The geological formation cannot be surpassed for his kind of ore, being blue day, selist traversed by elvan courses, and is identical with that of the most celebrated silver lead mines in Cornwall. The ore is worthing to 10 to 8 per cent. for lead. The King Arthur contains seven lodes. An adit level has been driven on the course of the most northerly of these lodes, which is enoughed for its argentiferous gossan, mundis, spar, flookan, and yellow copper ces and blende, carrying also a leader of solid lead. A shaft has been sunk in this level to the argentiferous gossan, mundis, spar, flookan, and yellow copper ces and blende, carrying also a leader of solid lead. A shaft has been sunk in this level to the argentiferous gossan, mundis, spar, flookan, and yellow copper ces and blende, carrying also a leader of solid lead. A shaft has been sunk in this level to the argentiferous gossan, mundis, spar, flookan, and yellow copper ces and blende, carrying also a leader of solid lead. A shaft has been sunk in this level to the argent of the argentiferous gossan, mundis, spa

deady anticipated.

Vice-Chancellor Hall has appointed Mr. Edw. Hart (Hart Brothers, Tiblets, and Co.) official liquidator of the British Guardian Life Assurance Company Limited), to whom all claims should be sent.

Vice-Chancellor Hall has appointed Mr. A. Good (Good, Daniels, and Co.) the official liquidator of the Universal Fire Losurance Company (Limited). The Master of the Ralls has appointed Mr. R. Eaton James (Tribe, Clarke, and Edon James), of 2, Moorgate-street Buildings, to be official liquidator of the Mid-Wales Hotel Company (Limited).

The interim report of the Mwyndy Iron Ore Company shows that the net profits for the half-year amount to 650 2., which, by the addition of the pre-vius balance, is increased to 11,616.; 20002. Is appropriated to the payment of a dicited of 1s, 61, per share, leaving 3016/, to be carried forward to the account of the second half year. The directors have acquired the lease of a property of 36 acres on the eastern boundary for 750 2.

The London and County Bank will pay for the past six months a wifeed of 8 per cent., and curry forward 25,719%. At this time last year the dissipation was at the same rate, and 82,763% was carried forward.

A petition for winding-up the Cornwall Chemical Company (Limited) is to be heard before Vice Chancellor Malins.

A petition for the winding up of the Welsh Ironworks Company (Limitel) is to be heard before the Master of the Rolls on Aug. 5.

The creditors of the Direct Iron and Steel Company (Limited) are requested to send particulars of their claims to the liquidator by Sept. 15, and those of the Trimsaran Coal, Iron, and Steel Company (Limited) by Sept. 5.

FROM A LONDON STOCK BROKER'S CIRCULAR.

The foreign market has been in an extremely quiet state all the week, and excepting a fall of 5 to 7 per cent. in Argentine Bonds there are few great changes to note. Spanish have been in some demand, and show an improvement for the week, Russians and Egyptians have fluctuated but little, Turkish securities are firm. special layer included out little, turning securities are irrin. Including in the layer in English railways on large speculative gigs, patiedarly in Caledonian, Great Western, North British, Chatham defence, and Great Esstern shares, all of which have materially improved in the tier is in North British amounting to 7 per cent. for the week; the Northstern dividend was amounced to-day, being 7 per cent., against 8½ per cent. It is corresponding period of the last half-year. The English funds are rather siter.—Freday Marang, July 28.

J. Y. WATSON, Jun.

PRINCE OF WALES is still looking remarkably well. The 45 west has steadily improved in value, and is likely to rapidly further improve, while there is a strong masterly lode in the 55 west, worth about 15/L to 20/L per fathom, and looking very promising indeed for an early improvement. But the great point in the mine is the early cutting of the lode at the 77. The water issuing from the end is so highly charged with copper that it is actually cutting the ironwork into level to pieces, so that the belief entertained by the local authorities that a fine course of copper will be shortly cut here is fully justified. The shares are lattle 77 the shares will limp to a high price, for a dividend mine will then be as many pands which took place two or three years ago, are fully persuaded an election and the state of the shares will rise is luminent (as the coarse of copper or then cut existed under located). There is an immense run of undeveloped ground laid open, and a great father. There is an immense run of undeveloped ground laid open, and a great father.

PATENT GUNPOWDER COMPANY.—The directors' report to be presented at the annual general meeting, on Monday, states that the casumption of the patent gunpowder is gaining ground throughout the country. Orders for this powder having been already received from numerous mines and quarries, the result of very satisfactory tall, depots are being established at Festings (North Wales), St. Day (Cornwall),

Edinburgh, and Leicester, in all of which districts a good demand is anticipated. A quantity amounting to nearly 5 tons has been delivered during the last two months, and orders for 4 tons more are in hand. The company's agent for Victoria, Australia, reports that a demand is springing up there for the powder, and there is every prospect of a large business. Orders for 2 tons for this port have just been executed, and remittances are advised on account of former shipments. Owing to the stagnation of the ordinary black gunpowder trade, and a great reduction in prices, the board stopped the manufacture of this description of powder in April last, and to prevent the mills at Ewell becoming an annual dead loss to the company, after much negociation, the directors decided to accept the sum of 1000l, from the landlord for the surrender of the lease, and they hope the shartholders will approve of this action.

ISSUE OF £142,764 FIVE PER CENT. PERPETUAL DEBENTURE STOCK,

Being part of a total sum of £168,000, of which £25,236 are already issued. Entitled to interest up to 4 per cent. (£6720) per annum, payable out of a fixed rent of £33,303 a year, guaranted by the London and South-Western and Midland Railway Company, as Lessees of the Somerset and Dorset Railway for 999 years, and a further 1 per cent. when the gross receipts amount to £66 per mile per week.

THE DIRECTORS OF THE

SOMERSET AND DORSET BAILWAY COMPANY

Are PREPARED to RECEIVE APPLICATIONS for £142,734 of FIVE PER CENT. PERPETUAL DEBENTURE STOCK, No. 3, being the unissued balance of a total sum of £168,000 of such Stock. Price of issue, par, payable as follows, viz.:-£10

No. 3, being the unissued balance of a total sum of £168,000 of such Stock. Price of issue, par, payable as follows, viz.:—£10 per cent. on application, and £90 per cent. on allotment.

The interest on this Debenture Stock, up to 4 per cent. per annum, is payable from the 1st of November, 1878, out of the fixed rent of £33,308 a-year (which is sufficient to cover such interest and all prior charges), guaranteed by the London and South-Western and Midland Railway Companies, under their lease of the Somerset and Dorset Railway for a term of 999 years, confirmed by an Act passed in the present Session of Parliament. The remaining 1 per cent. will accrue and be payable when the gross receipts of the line amount to £66 per mile per week, The average gross receipts of the railways in Great Britain exceed £78 per mile per week.

Interest at 4 per cent. per annum, from the £1st July, 1876, up to the 1st November, 1878 (after which date it will be covered by the fixed rent), will be paid half-yearly in the months of January and July, out of funds to be deposited for that purpose in the hands of Messrs. Robarts, Lubbock, and Co., Bankers, Lombard-street, London. The first payment of interest will be made in January next.

Applications in the annexed form, accompanied by the amount payable on application, may be addressed to Messrs. Robarts, Lubbock, and Co., 15, Lumbard-street, London, E.C.; Stuckey's Banking Company, Glastonbury; or to the undersigned,

ROBERT A. READ, General Manager and Secretary.

London Offices, 16, Parliament-street, Westminister, S.W.,

21st July, 1876.

LEAD MINING IN CARNARYONSHIRE.

CWM DWYFOR MINES.

Seme attention is now being given to the lead mines of this county, and it would appear to be quite possible that before long they may further force themselves on the attention of capitalists devoted to British lead mining, an industry which, generally speaking (as Mr. Murchison has shown in his recent pamphlet on the subject), has been highly remunerative. Whatever may befall our old and hitherto profitable deep Cornish mines, as has been before remarked in these columns, the mines of Wales must in the nature of things, from the many advantages they possess, advance from stage to stage of progress.

Situated at the head of Nant-y-Pennant, about three miles from Beddgelert, in a hitherto unfrequented part of the district, are the Cwm Dwyfor Mines. Some idea of the previous isolation of the place and badness of the roads may be formed when it is stated that the cost of cartage to Portmadoc, the nearest port or town of any size; was 20s. per ton, and as a consequence, all mining, quarrying, farming, building, and other operations were greatly impeded. In the year 1872, however, an Act of Parliament was applied for and obtained by the Gorsedda Junction and Portmadoc Railways Company for the adaptation to a 2-ft. gauge locomotive line of a horse tramway (constructed some years previously for the accommodation of the Gorsedda Quarry), and also for a new line to commence by a junction with this altered tramway near Llyn Cwmstrallyn, and to extend in a northernly direction past the Prince of Wales Slate Quarry to the head of the Pennant Valley, where, as before stated, the Cwm Dwyfor Mines are situate. One would have supposed that the landowners whose properties would be so greatly benefited by the cheap and (asy means of communication to be afforded by this line would have given the project all the assistance in their power. Such, however, does not applear to have been the case. The line was, notwithstanding, fully opened for goods traffic on Sept. 2 last, and has already been of great advantage to the district.

Our present object, however, is to give some account of the Cwm Dwyfor Mines. The sett extends about ½ mile east and west on the course of the lodes, and the same distance north and south. Some years since operations on a very small scale were carried on at Cwm Dwyfor by common miners, who realised good profits from their working into the lodes at surface. The lodes are parallel with and adjoining those of the celebrated Drwysy-Coed Mine, which is add to have been worked for the last century. The bearing of the lodes is east and westabutting against the main cross-course of the country. The present compa Situated at the head of Nant-y-Pennant, about three miles from

is east and westabutting against the main cross-course of the country. The present company on taking possession of the property commenced operations on the northern or upper series of lodes to which part of the mines the workings of the old men had been mainly directed, and here they worked on three copper lodes with very good results. They, however, soon discovered that the lower series of lodes presented indications which appeared likely to lead to more immediate results, and their recent operations have accordingly been mainly directed to this part of the mines. The old men had been at work here also, but only in a very crude manner, and the present company, therefore, determined to sink a new main shaft; when this shaft was down 10 fathoms cross-cuts were driven north from the shaft 20 fathoms, and south from the shaft 17 fathoms; by means of these cross-cuts the existence of eight lodes was proved, four having been intersected by the north cross-cut and four by the south cross-cut. Only three of these lodes have as yet been driven on—the No. 4

only three of these lodes have as yet been driven on—the No. 4 north, or old men's lode, the No. 3 south, and the No. 4 south lode; the latter lode has produced most of the lead raiseed by the company, it having yielded in some places fully 2 tons of ore per fm. A small shaft was sunk for 10 fms. on this No. 4 lode south, and the level at that depth from the south cross-cut was communicated with it. This shaft (Stewart's) is now being sunk 11 fms. below the 10, and it is expected that in two months more the required depth for it. This shaft (Stewart's) is now being sunk 11 fms. below the 10, and it is expected that in two months more the required depth for a 20 fm. level will be reached. When these levels are driven east and west a large quantity of valuable stoping ground will be laid open. A level has also been driven for 20 fathoms east of the crosscut on the course of the No. 3 south lode, which yields about 10 cwts. of silver-lead ore per fathom, besides a little copper ore.

The company have recently erected powerful crushing machinery, and have constructed an incline and tramway from the terminus of the Gorsedda Junction and Portmadoc Railway up to the ore floors; by these means the transit of produce from the mine is rendered very easy, cheap, and expeditious, a great desideratum. It is in contemplation to obtain a set of self-acting dressing machinery, by which the returns of ore to market can be largely increased.

There is still a large amount of unexplored ground in the sett, which will by the extension of the present deep adit be proved at

a depth of about 50 fms. below the present workings, and from the results already obtained there would appear to be, now the main difficulties are overcome, a successful future before the undertaking.

Culties are overcome, a successful future before the undertaking.

OLEAGINOUS STONES.—The police a short time ago arrested a warman because having on different occasions sold wax to grocers she refused to say where she obtained it. At last she declared that she had procured it from a certain species of stone. Two days after a professor of chemistry happened to be in the office of the examining magistrate, who laughingly related the fact. "Do not smile," said the savant, "for in several localities of Galicia and Moldavia there is found an oleaginous stone which resembles wax and which melts with the heat of the sun. Chemists call it ozocerite, and a large trade is done in the article. Why may not the same sort of stone exist in our mountains?" The magistrate at one ordered that the woman should be again brought before him, and she declared that the facts were precisely such as the professor had supposed. "But why," asked the functionary, "did you refuse to tell where you had obtained the wax?" "Because the Government would have soon deprived me of that source of gain," she replied; "the piece of land where this precious article is found is, however, my own property." She was immediately set at liberty.—Gazzetta dell' Emilia.

ZINC ORES.

ARMAND FALLIZE,
INGENIEUR-CIVIL, A LIEGE (BELGIUM)
BUYER
1.—CARBONATED AND OXYDED ZINC ORES (CALAMINE, &c.

2.—ZINC AND LEAP ORES MIXED TOGETHER, BUT DRESS-ABLE KINDS ONLY.

CAPPER PASS AND SON, BRISTOL, ARE PUECHASERS OF

LEAD ASHES, LEAD SLAGS, SULPHATE OF LEAD, HARD LEAD, BRASS SLAGS AND ASHES, COPPER REGULUS, MATTE, SCORIA, TIN ASHES, TERNE ASHES, &c., and MIXED ORES or REFUSE, containing LEAD, COPPER, TIN, or ANTIMONY.

THE RIPLEY SPELTER COMPANY RIPLEY, DERBYSHIRE, ARE PURCHASERS OF

BLENDE AND CALAMINE ORES, HARD SPELTER, SPELTER AND ZINC ASHES, FLUX SKIMMINGS, and other ZINC RESIDUES. Also COPPER SLAG, BRASS ASHES, TIN and TERNE ASHES, and SCRUFF, and other METALLIC RESIDUES.

WILLIAM CRAWFORD, COAL FACTOR AND GENERAL AGENT, CONSTANTINOPLE,

IS OPEN TO ACCEPT THE AGENCY OF A GOOD FIRM.

SAN JUAN, COLORADO, U.S.A.

E. STEINBACH, C.E.,

METALLURGIST AND ASSAYER,
WILL VISIT, INSPECT, AND REPORT UPON MINES.
DEL NORTE, RIO GRANDE COUNTY, COLO.

T. R. GLOVER,
MINERAL DEALER AND BROKER AND GENERAL FINANCIAL AGENT, 2, EXCHANGE STREET EAST,

LIVERPOOL. E. JACKSON,

Associate of the Royal School of Mines,
ANALYS AND ASSAYER.

Assays or Complete Analyses made of Copper, Silver, Lead, Zine, Tip, and other Ores. 106, QUEEN VICTORIA STREET, LONDON, E.C.

MINING ENTERPRISE IN SPAIN.

R. JOSE COMAS GALIBERN, TORROELLA DE MONTGOI, GEVONE, SPAIN, Proprietor of Iron and Lead Mines, Exporter of Ores and Spanish Products, is prepared to DISPOSE OF SOME VERY RICH AND PROMISING SPANISH MINES; also of LARGE QUANTITIES OF ORE. Address as above.

ESTABLISHED 1846.

C. H. MAY AND CO.; GENERAL ADVERTISING OFFICES, 78, GRACECHURCH STREET, LONDON, E.C.

ADVERTISEMENTS inserted in all ENGLISH, FOREIGN, and COLONIAL NEWSPAPERS.

M ESSRS. ENDEAN AND CO., STOCK AND SHARE DEALERS, 85, GRACECHURCH STREET, LONDON, E.C.

WANTED.—A GENTLEMAN, thoroughly acquainted with the MANUFACTURE of GOLD, SILVER, and COPPER, DESIRES on ENGAGEMENT at HOME of ABROAD.

Address, "Argent," General Post Office, Briston. TO CAPITALISTS AND PROMOTERS.

POR SALE, several very good LEAD MINES in RHENISH PRUSSIA. A LEAD MINE to be LET in the same district. Capital wanted to work a rich Lead Mine more extensive. Apply by letter to "D. J.," MINING JOURNAL Office, 26, Fleet street, London.

CAPITALISTS AND INVESTORS SEEKING PROFITABLE INVESTMENTS should trien their attention to BRITISH LEAD MINING: Twelve mines, on an outlay of £232,250, have paid in dividends £2,214,780. The undersigned, after twenty years experience, has every confidence in recommending the TREGADOCK UNITED MINES, which have been recently inspected. Full particulars, personally or by letter, of John R. Pike, Crown Chambers, Threadneedle-street, London.

VICTORIA (LONDON) MINING COMPANY
(LIMITED),
57 (late 30), Moorgate-street, London, E.C., July 27, 1876.
Notice is hereby given, that an EXTRAORDINARY GENERAL MEETING
of the shareholders of this company will be HELD at the company's offices, as
above, on THURSDAT, the 3rd day of August next, at One o'clock in the afternoon precisely, for the purpose of DECLAING a DAYUDEND, PAYABLE on
Monday, the 14th August next.

By order of the Board,
J.W. PURCHASE, Secretary,
N.B.—The Transfer-books of the company will be closed from Wednesday, the
2nd day of August, until Saturday, the 12th day of August, both days inclusive,

MR. W. TREGELLAS, 122. BISHOPSGATE STREET
WITH 1N, E.C.,
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М в. м. M. W. BAV BAWDEN, LISKEARD, CORNWALL.

ANALYSES of every MINERAL PRODUCE CAREFULLY CONDUCTED.

Date.	Mines.	Tons	. P	rice	per	tor	n.	Purchasers.
July 24-Gre	eat Laxey	100	*** * ***	£23	1	6		Weston, Son, and Co.
25 -Fra	nk Mills	30	********	12	7	6		South Wales Smelt. Co.
26 -Roc	khope	25	*******	12	1	0		J. Dinning.
27-Va	n	100	******	14	0	6		Pauther Lead Company
- di	tto	250		13	15	0		ditto
— di	tto	100		14	5	0		ditto
- di	tto	50		14	0	0		Mining Co. of Ireland.
	(ines	Ton	BLE:	Pric	e ne	r t	on.	Purchasers.

very easy, cheap, and expeditious, a great desideratum. It is in contemplation to obtain a set of self-acting dressing machinery, by which the returns of ore to market can be largely increased.

There is still a large amount of unexplored ground in the sett, which will by the extension of the present deep adit be proved at the proved at the present deep adit be proved at the proved at the present deep adit be present deep adit be proved at the present deep adit be pr

Notices to Correspondents.

"A Much inconvenience having arisen in consequence of several of the Number during the past year being out of print, we recommend that the Journal should be Aled on receipt; it then forms an accumulating useful work of reference.

during the past year toring on the past year toring on the field on receipt; it then forms an accumulating useful work of reference.

NORTH DELABOLE AND BOURTHICK SLATE QUARRY (Cornwall).—Can any of your readers inform me if the following rumours relative to this property are true?—

1. That the lord can only grant a lease for a limited term, which is considered too short for state quarries.—2. That the percentage of state compared to the enormous quantity of overburden and rubble is very small.—READER.

THE COPPER MARKET.—I am one of the many who have lost somewhat heavily during the last few years in mining, and I do not now come forward with vindictiveness, or loud complaints of "having been fleeced," &c., for I believe that the mines which have swallowed up my capital have been worked honestly, and with every earnest intention to command success: but, as your wild, sometimes correct, but often incoherent correspondent, Mr. Barnard, was writing some few weeks since about being able to treat ores by a very economical process, I think the present a very fitting opportunity for him to test his principle, and prove that mining can be successfully conducted even in the present depressed times. It has happened that in adversity good remedial measures have been introduced by which "one and all" were benefited. May we hope that Mr. Barnard can now be able to lend a helping hand in the onward economical movement, by which we all hope to benefit.—Shareholder.

**Received.—"G. R." (Orenburg): Next week-F. M. F. Cazin (Santa Fé, N. M.)—

"T.H."—"S J."—" One who wes present "—"Stannum "—" Shareholder "(Van Consols)—" B.H."—" J. T.": No.—" Progress (Merthyr Tydvil): Next week.

THE MINING JOURNAL,

Bailway and Commercial Gazette.

LONDON, JULY 29, 1876.

THE PROGRESS AND PROSPECTS OF SLAG UTILISATION.

THE PROGRESS AND PROSPECTS OF SLAG UTILISATION.

There never was a time when more attention was being given to the successful utilisation of slag than at present, and at no former time did the efforts put forth in this direction promise to yield more satisfactory results. It is probable that the exceptional depression that now hangs over the irn trade has caused much more attention to be given to this matter than would have been bestowed upon it had the production of the material from which the waste vitreous product called slag is obtained been attended with profit. Be this, however, as it may, there can be no doubt of the fact that in every part of the United Kingdom where the manufacture of pig-iron is carried on, and to a large extent outside the boundaries of this country, various attempts, attended with varying results, are now being made to produce from slag commodities that are in every day request, and for most of which there is an exceptionally large and regular demand. In the Cieveland district two companies are carried on successfully on the limited liability principle for the manufacture of cement, bricks, paving blocks, tiles, and agricultural sand, from the waste products of the blast furnaces. One of these—the Tees Scories Brick Company—is chiefly engaged in the manufacture of bricks and paving stones on Woodward's patent, whereby the slag is taken from the furnace and run into moulds, where it is allowed to solidify and subjected to to an annealing process. This company has hitherto carried on its operations at the works of Stevenson, Jacques, and Co., but it is now making arrangements for constructing new appliances, with some important modifications and improvements at the works of the Lackenby Iron Company. The bricks produced by Woodward's process are largely used for building purposes on Teeside, and the company have nown order for half a million for Stockton. The company have nown order for half a million for Stockton. The company have nown order for half a million for Stockton. The compa

the Coltness Iron Company was indefinitely abandoned. Negociations, however, are now pending for proceeding with experiments in the Wishaw district, and the results obtained from some slag found in that neighbourhood promise very gratifying and successful results. We believe that Mr. WOODWARD has recently been making efforts to localise his process in Sheffield and other districts, but the present is not a time when capitalists are disposed to give much encouragement to a new thing, and especially to any attempt to utilise that which has hitherto been regarded on all sides as utterly worthless. Great, however, as have been the strides made in the utilisation of slag on the North-East Coast, the enterprising and aggressive gentlemen in that district are not likely to enjoy a monopoly of credit in this matter, for at the present time a company is in course of formation on the West Coast for manufacturing glass from the vitreous products of the hematite iron made in the Barrow district, and when we mention that the Barrow Hematite Barrow district, and when we mention that the Barrow Hematite Iron and Steel Company, of which the Duke of DEVONSHIRE is Chairman, and Mr. Joslah T. Smith general manager, have no less than 16 furnaces of their own, it will at once be seen that there is plenty of scope for such an undertaking, so far as the available supply of slag is concerned. The process by which it is proposed to make glass at Barrow is patented by Mr. B. BRITTEN, and consists of taking the slagar it issues from the blast furnace conducting it.

supply of slag is concerned. The process by which it is proposed to make glass at Barrow is patented by Mr. B. Britten, and consists of taking the slag as it issues from the blast-furnace, conducting it to a tank, and there mixing it with various chemicals, which give it the transparency and the consistency of glass. From the results already obtained in repeated experimental its claimed that the glass produced by this mode will be acid proof, and capable of being applied to all purposes for which the best bottle glass is used. At the Wellingborough Ironworks also efforts are now being made to effect the utilisation of slag for this and kindred purposes, and the results obtained are said to be very satisfactory indeed.

Those who visited the Royal Exchange at Middlesborough on the occasion of the recent quarterly meeting of the iron and allied trades would, probably, be struck by a woolly looking substance made from slag, which was exhibited by Mr. Charles Wood, of the Tees Ironworks. This curious material was produced by blowing steam through the slag as it issues from the blast-furnace. Several suggestions were made for its profitable utilisation, and Mr. Wood himself stated that he proposed making experiments with a view to its employment in the manufacture of paper. It has, however, been made on the Continent, and used for a considerable time past, for a very different purpose. At the Essen Works, in Prussia, Herr KRUPP, the famous ironmaster, has made slag wool for covering boilers and steam pipes for at least three years, and has proved that a single ton of this so-called "silicate cotton" will cover, with a layer 2½ in. thick, an area of 500 square feet. It only requires careful building to retain this covering in position, and from its fibrous character any leakage is easily perceptible. Samples of this slag wool were also shown at the Vienna Exhibition, and attracted a good deal of attention. We are afraid, indeed, that we must concede to our continental rivals the credit of having been before us in the

met by the rush of water from behind, and is thus broken up into the state of coarse sand, which, after falling into a sump in front is lifted up by ordinary chain buckets, and either loaded directly into railway wagons or otherwise disposed of. We believe it was Mr. MrNaby, director of the Franche Compté Iron Company, who first conceived the idea of utilising slags by granulating them as they came from the blast-furnace, using for this purpose an engine actuated by the gases of the furnace, and requiring hardly a single horse-power. At these works, which consist of five blast-furnaces, each producing 20 tons of iron in the 24 hours, the utilisation of the wagte vitreous products in this way effected a saving equal to the wages of 20 men employed in charging the slags, and of five blacksmiths who prepared their tools.

There is undoubtedly a very wide field yet awaiting occupation in this direction; and although much has already been done, agreat deal more is required to obtain to the full extent the results that are desiderated. It has been shown by the continuous experience of many months that slag may be profitably utilised in the production of ordinary building material; but this is not enough. It contains ingredients which ought to be, and we believe in course of time will be, applied to much more valuable purpose. A process or processes are still required for the refinement of the slag, for unless it is carefully refined and separated from all extraneous ingredients it cannot be profitably employed in the production of articles of commercial value to which it is now proposed to apply it. Basalt and volcanic rocks have been employed in various countries in the manufacture of glass, and some slags are almost of the same chemical composition as basalt, which has, no doubt, suggested their use in this important branch of manufacture. Already in some parts of Belgium arrangements have been made by glass manufacturers for the supply of a certain quantity of slag, which is run out on cast-iron plates, and cooled supply of a certain quantity of slag, which is run out on cast iron plates, and cooled with water, previous to being used. It would not be wise to expect too much from the employment of slag for this or any cognate purpose; but, at the same time, it need not cause surprise if from the experiments and researches now being made in various quarters some process were evolved that would lead to a complete revolution in the glass trade, to say nothing of what may be done by the employment of this inexhaustible material

THE IRON AND STEEL TRADES

THE IRON AND STELL TRADES.

The science of steel and iron making should be largely promoted by the summer meeting in Birmingham of the Institution of Mechanical Engineers. Not even at the meetings of the Iron and Steel Association has the question of machine puddling ever been more thoroughly ventilated. Mr. CRAMPTON's paper furnishes a compendium of all that has been done, and it brings the information down to the latest moment. Aided by the illustrative digrams even those engineers who have not yet seen the Crampton furnace in operation at Woolwich were able thoroughly to master the invention. And the abundance and variety of the specimens of steel and iron which the furnace has assisted to produce, which were shown upon the tables, amply illustrated what the furnace can be made to do. The trade should now be able to manipulate without hindrance masses of iron certainly up to half a ton in weight. This to mechanical engineers is a matter of great interest, and so certain of them express themselves. They attach to that fact more importance than they do to the ability which ironmasters now possess to puddle largely without the interposition of the puddler. Mechanical engineers are not, however, all practical ironmakers, and their satisfaction at the facility with which by the revolving puddling furnace large masses of iron can be manipulated was not increased by the experience of a member of the Institute, who is a practical ironmaster, and who, moreover, at great pains and a large outlay, has, for a good two years and a-half, been trying to solve practical ironmaster, and who, moreover, at great pains and a large outlay, has, for a good two years and a-half, been trying to solve the problem of the rotary puddler.

Than Mr. JEREMIAH HEAD no one has thought more highly of

the problem of the rotary puddler.

Than Mr. Jeremiah Head no one has thought more highly of the Crampton furnace. He watched its operation narrowly, and with great interest at Woolwich. What he saw there induced him to begin as long back as we have mentioned to try to use it in the puddling of iron at his works at Middlesborough. So satisfied was he with the advantages of the apparatus that he had six of the furnaces erected, and Mr. Crampton showed, as amongst the choicest apecimens of his samples, sections of boiler plates rolled by Mr. Head. On his own part, Mr. Head was very frank, and as a man of science talking to men of science, he desired to be exact. He was inclined to think that, to use his own phrase, nothing would be gained by making everything the colour of the rose. Mr. Head wished it to be understood about the boiler plate section that the plate was not all equally irreproachable. His experience of the working of homogeneous masses of puddled iron was that, when cold, it displayed surface imperfections which did not appear when the iron was hot. Every ironmaster knows only too well for how little a defect a large and costly boiler-plate will be rejected by engineers who are determined to obtain purity and strength in such iron, and how great is the loss which comes about when a completed plate has to be cut up and again passed through the furnace. The mechanical engineers were hardly prepared to hear that Mr. Head, after what he has done with the rotary puddler, should be compelled to say that in the present state of the science of machine puddling he prefers to make a plate of piled iron. Nor has Mr. Head's experience been such as to enable him to endorse Mr. Crampton's views as to the extent to which by the revolving furnace manual labouris dispensed with. Mr. Head puts to the debit side a greater cost on that account than Mr. Crampton would charge. It was with much surprise that the mechanical engineers learned that the fettling requisite for a Crampton furnace involved side a greater cost on that account than Mr. CRAMPTON would charge. It was with much surprise that the mechanical engineers learned that the fettling requisite for a Crampton furnace involved an outlay at the rate of 22 to every ton of puddled bar. Mr. CRAMPTON, it is easy to understand, would not attribute so much importance to surface defects in a plate as some of his brother engineers. Unquestionably greater depreciatory significance is attached by engineers to little blisters upon the surface of the boiler-plate than the iron sometimes merits; still, they are the buyers, and enforce the conditions upon which they buy. So long, therefore, as an unblemished surface is stipulated by the engineers, so long must the ironmaster see to it that the plates which are turned out in his mills

blemished surface is stipulated by the engineers, so long must the irronmaster see to it that the plates which are turned out in his mills are blisterless. The cost of fettling Mr. CRAMPTON met very pertinently, when he said that though the fettling when it was put into the furnace cost the money which Mr. HEAD had quoted, yet when it was taken out it was worth, as puddled iron, twice as much, then the more fettling the better for the interest of the irronmasters. If, however, practical irronmakers cannot yet accomplish all they could wish in the making of iron with the rotary puddler, it would appear to be likely that in their capacity as steelmakers they may yet find it of vast service. It is scarcely possible for higher testimony to have been given under this head than that supplied by Mr. WEBB, the famous locomotive superintendent of the London and North-Western Railway. Mr. CRAMPTON had amongst his specimens a section of steel rail of which the base was Cleveland iron. That iron he puddled at Woolwich, and the puddled ball he sent to That iron he puddled at Woolwich, and the puddled ball he sent to Crewe. Here it was passed through the Siemens-Martin furnace, mixed with a little No. 3 hematite and 5 per cent, of spiegeleisen. Of this mixture the steel rail was made, of which Mr. Crampton Of this mixture the steel rail was made, of which Mr. CRAMPTON showed the specimen, and a splendid rail it was. The phosphorus indigenous to the ironstone of the Cleveland hills, by reason of its fish origin, was wholly eliminated, whether in the puddling-furnace or in the Siemens-Martin is not clear. Anyhow, the hateful hindrance to the making of steel and first-class iron from Cleveland ore was got rid of somehow. Dr. Siemens aims at getting rid of it by the direct process, but we are not aware that as yet even the Siemens-Martin furnace has been potent to make good steel from Cleveland ore. Mr. Webb has great faith in the Siemens-Martin, and with its aid is produced from scrap iron and scrap steel rails for which he claims superiority to any in any manner produced by for which he claims superiority to any in any manner produced by the Bessemer process, yet at a cost of from 10s. to 12s. under that of Bessemer steel. And Mr. Weed should know, for he has both Besseemer and Siemens-Martin plant at Crewe, where he produces 200 tons a week, mostly from iron and steel scrap. Mr. HAWKSLEY has views relative to what may be done with the Bessemer plant in the way of attaining the object which is aimed at in Cleveland,

where it is still believed that the native hills may be turned where it is still believed that the native hills may be turned good steel, but we hardly think Mr. HAWKSLEY would have adru the views which he expressed in Birmingham last week if he bad fully read Mr. Bressemer's specifications. But we quite concretion that, however wanting Mr. Crampton's furnace may appa securing homogeneous purity, it appears capable of largely as in the work of utilising sulphurous ore in the making of steel.

MINING OPERATIONS IN NORWAY.

MINING OPERATIONS IN NORWAY.

In reporting on the trade and commerce of Norway for the par 1875, Consul-General Jones makes some brief remarks on this six pect, of which the following are the more noteworthy features. The proceeds of the mining operations during the year were, is his opinion, less than usual. The State silver mines at Kongoles, have yielded annually during the last four years an average have yielded annually during the last four years an average 15,500 marks of fine silver, valued at 10,335%. A lode has later been discovered at the silver mines of Vinorem, which promise to be profitable.

been discovered at the silver mines of Vinorem, which promise to profitable.

IRON.—Of the Norwegian iron mines two only were able to keep their furnaces at work during the past year. Some inconsidently shipments of ore were made. The lodes discovered in the neighbourhood of Bodō have disappointed the expectations formed as to the quality of the ore, which turns out to be very inferior.

COPPER.—The yield of copper has been under the average. Open tions have been recommenced on the old works of Hougeaud with for the present, a prospect of success. The export of copper final Norway in 1875 was about 14,000 tons.

for the present, a prospect of success. And export of copper fine Norway in 1875 was about 14,000 tons.

NICKEL.—Nickel mines have yielded good and profitable return, although the prices of this metal have declined. Most of the work now smelt their own ores, but the ores of the Espedaten mines as sent abroad for this purpose, as the furnaces are not yet erectal. The mines of Senjen, which are owned by Englishmen, prote a source of considerable gain to the proprietors. The official states are not shows that during the past year they have yielded 120 tons of metal, which, at the rate of 1000%, per ton, represents a total of 120,000%. Of fresh mines, those in the Sigval appear to our Consal. General to be the most promising, and the works there will shouly be in a position to smelt their own ores. Many new mines of nicked have been opened, some of which will, doubtless, prove remunerating. Pyrites and apatites apported was very nearly the same as in the previous year—a total of the provious year—a total of the provious

ported was very nearly the same as in the previous year—a badd 40,000 tons. No new mines of the latter have been discovered. COAL.—The coal mines opened in the Island of Joederen have far proved to be of no value.

far proved to be of no value.

GOLD.—Gold washing is still carried on in the Jana river (Fig. mark), but since the commencement in 1869 has only yielded 16,850 grains, nor does there appear any reason to hope that it will erg be a more important source of wealth to the country.

Writing from Gottenburg, Mr. Consul Duff reports that the coal writing from Gottenders, and constant reports and use on fields in the south part of the country do not appear to yield eithe the quantity or the quality of coal expected from them, but large works have been built for the manufacture of fire-clay goods, and works have been dutted to the manufactories promise to successful and profitable. Coal and coke, pig and finished iton, a well as plates and bars, it may be added, form a very large figure in the imports into Gottenburg.

THE PULSOMETER.

In the Supplement to this day's Journal we give a fully illustrated description of this invention, of which the manufacturers, Messa description of this invention, of which the manufacturers, Mess. Hodgkin, Neuhaus, and Co. have just made a very striking diplay in action at the Birmingham meeting of the Royal Agricultual Society, where the Pulsometer was recognised as the novelty of the Show—one of the smaller sized pumps, costing 40%, and supplied by steam through a $\frac{3}{4}$ -in. steam-pipe, discharging continually 10,000 gallons of water per hour, drawn from the lake at a distance of 190 feet. The flow of water was without intermission, and it relative and volume attracted the attention of crowds of visiton ularity and volume attracted the attention of crowds of visitor throughout the week.

The important features which recommend this pump to all these

who require to raise larger or smaller quantities of water to a makerate height are the following:—

The pump can never be worn out.

The pump can never be worn out.

It will pump sand, gravel, or grit without suffering injury.

It needs no skilled attendance.

It never requires oil, tallow, or packing.

It is cheaper than any other pump, and requires less space.

For well-sinking it must prove a great boon, as it can be field position where a centrifugal pump could not be used, and where any of the other forms of steam-pumps would be rendered useles in a week by the action of the gritty matter. Large sizes were alsochibited with equal striking results. Our illustrations show the will in which the Pulsometer can be used in sinking a well or making any other excavation: it is simply suspended by slings, and is lowered as the water lowers, discharging the sand and mud together with the water through the flexible rising main.

THE SELECT COMMITTEE ON EMPLOYERS' LIABILITY FOR INJURY, &c.

INJURY, &c.

Some singular if not extraordinary evidence has been given before the above committee that makes one wonder at the peculin views that some persons have of what is right and just. The gratpoint which Mr. Macdonald strove for in his Bill was to fix a employers—more, especially on mineowners—liability for any accident that took place by which one servant was injured by another in the same employ: it did not matter whether by negligeness otherwise the master was to be held personally responsible for very act committed by a person in his employ which led to injury. Anything more illogical or preposterous cannot well be conceived. Webster of the personal of an order given by an employer himself led to injury to anyone, there could be no doubt but that the employer responsible. But it is a very different thing, say, when two me in the same employ through their own carelessness or negligene injure themselves, or when one injures the other. The law as its present stands is that the master shall be liable for the acts of his servants when he expressly orders them to do certain things, or personally and the proper was the careful or the acts of his servants when he expressly orders them to do certain things, or personally and the property and the present stands is that the master shall be liable for the acts of his servants when he expressly orders them to do certain things, or personally and the present stands is that the master shall be liable for the acts of his servants. servants when he expressly orders them to do certain things, or pessonally co-operates with them in carrying them out.

That appears to be fair. But Mr. MACDONALD and others think that the water hards are considered to the state of the control of the state of the control of t

That appears to be fair. But Mr. Macdonald and others thin that the master, being presumed to be a capitalist, should be made to pay for any accidental injury to a servent, even if caused by his indiscretion, and of which his employer could not have the slighter cognizance. Singular to say, we find this view participated inly gentlemen of high culture, and who have studied the subject. This Mr. C. P. ILBERT, on being asked whether he considered an employed should be held responsible for a thing over which he had no possible control, said he ought to be, although he admitted it would be case of great hardship. He considered that such liability should be case of great hardship. He considered that such liability should fixed on the employer, on the grounds of "public policy." On the same grounds he thought that a person perfectly guiltless should be a same grounds as the same grounds are in the same grounds. proceeded against, so that the innocent would be held guilty. We certainly cannot see the force of that public policy which makes the person innocent of all knowledge of a certain act guilty of it, and one think work highly of the level with the contract and th person innocent of all knowledge of a certain act guilty of it, nor do we think very highly of the legal mind that arrives at such an extraordinary conclusion. Mr. BROADHURST, a well known trade unionist, of course took the broadest of broad views, and considered it only just that where there should be bodily injury caused to asservant by the negligence of another in the same employ, it should not be any ground of defence that the cause of injury was due to the negligence of such person in the same employment. Wersend to become law it would take all responsibility off workmen, or it might even be that a man would actually injure himself to a small extent for the purpose of obtaining compensation and getting off work for a time. off work for a time

That the law relating to masters and servants as it stands at present is a fair and just one, few who can take a disinterested view of

it can deny, whom who of the law view ferent view that wrong of public P most freque knew of the which shift which shift would have now are. tion the vi bonald, o we cannot troduced p amongst a

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JULY 29. 1876.

class legislation gence of the workmen.

MECHANICAL PUDDLING.—At the Middlesborough Royal Ex-diange, on Tuesday, Mr. D. Hope exhibited a plan descriptive of his scheme for the production of mechanical pudding by an oscillating farmee. The inventor claims for the furnace simplicity of construc-tion, durability, and economy; and the usual "fettling" of an ordi-nary furnace is said to be applicable.

West Mostyn Colliery.—A splendid seam of coal, 9 ft. thick, has been reached at 90 yards from the surface, and the works are rapidly progressing most satisfactorily.

coal and Iron in the United States.—The authorities of the Boston Navy Yard have been instructed to make some 5-inch steel wire hawsers for the United States Navy department. The Consecticut Rulroad Company has laid with steel 41 miles of the 73 miles of its main track. The directors observe in their annual report:—"The present cost of steel rails is such that no road can afford to use iron in its renewals of superstructure." The total production of anthracite coal in Pennsylvania to July 1 this year amounted to 7,673,891 tous, against 6,342,677 tons in the corresponding period of 1875, showing an increase of 831,214 tons this year. The production of bituminous coal in Pennsylvania to July 1 this year was 2,134,113 tons, against 1,934,463 tons in the corresponding period of 1875, showing an increase of 185,655 tons this year. Combining anthracite and bituminous together, the coal production of this year will be seen to have increased to the extent of 1,016,869 tons. In the course of May the Union Pacific Railroad Company laid down steel rails to the value of 74,105. American iron rails are quoted at \$21 to \$22 per ton currency.

dividend and progressive, have come down to something like reason-able figures; the celebrated Van, for instance, is now reduced to a price at which the shares may be considered a fair investment, whilst some of the considered a fair investment.

whilst some of the progressive mines which were introduced at high premiums are reduced to a figure more suitable to properties which are at the best but speculative. Amongst the most successful mines lately introduced the Grogwinion presents an example of the great advantages possessed by many of the mines of Cardiganshirs, which may be worked to almost any extent above adit, or, in other words, without the aid of numerica or drawing machinery, at

the work, which may be worked to almost any extent above adit, or, in other words, without the aid of pumping or drawing machinery, at the same time having the assistance of unlimited supplies of water from the rivers for the purposes of washing the ores and working the dressing machinery. The Temple Mine, which has lately been ammenced, possesses the same advantages as the Grogwinion, and, as far as the development has gone, has proved highly successful. Another mine in the same locality—the Great West Van—is reported

quoted at \$21 to \$22 per ton currency.

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THE MINING JOURNAL.

The past week having inter sected a lode worth 50%. per fathom for lead.

THE COMMISSIONERS OF PATENT AND TRADE MARKS.—The recent decisions of the Commissioners, who are now for all practical purposes final authorities in such matters, are to the effect followings frequently meet with accidents in mines, and from what he will be fully endorsed. Wr. Machine to the employer which shifted the responsibility from the workman to the employer which shifted the responsibility from the workman to the employer will have a tendency to make the former more reckless than they would have a tendency to make the former more reckless than they which shifted the responsibility from the workman to the employer which shifted the responsibility from the workman to the employer which shifted the responsibility from the workman to the employer which shifted the responsibility from the workman to the employer which shifted the responsibility from the workman to the employer which shifted the responsibility from the workman to the employer which shifted the responsibility from the workman to the employer which shifted the responsibility from the workman to the employer which shifted the responsibility from the workman to the employer which shifted the responsibility from the workman to the employer which shifted the responsibility from the workman to the employer as an emblem denoting quality, cannot be considered by them as as ufficiently distinctive to form part of a registered trade mark which has not been used in the ordinary way of business before Aug. 3 last, when the Registration Act passed into law. The like inhibition extends to public buildings, national arms, flags, &c., the arms of boroughs, and so on. Further, no exclusive title can be conceded by the Commissioners to any words whatsoever of quality or admits the proposed of the workman

REPORT FROM CORNWALL.

July 27.—It does not seem at all unlikely that we shall see an agitation against the present system of dues. There was certainly nothing new urged in the remarks at West Basset the other day, but it is in itself somewhat new to find them stated at such a place, and in such a way. From first to last we have always contended that the arrangement with regard to the occupation of land and the payment of dues should be fair for both parties alike—the landlord and adventurer; whereas at present, or rather we should say under the present system, all the advantage is with the former. We say under the present system, because, fortunately, that is not strictly carried out by many a mineral lord, but it is common to find the dues reserved either reduced to a moderate amount, or given up during pleasure; and, in fact, if this was not so the system could never have lasted until now. If all landlords had insisted upon their full dues, as Mr. Fortescue has done in the West Basset case, one of two things would have happened long ere this: either mining would have been practically annihilated, or the lords would have been forced to give way by a general combination on the part of the mining interest. It is clear, however, that if delayed thus a change must be made. Dues must be paid on profits only, and mineral lords must be content with that, and fair payment for surface occupation and surface damage; nor is there any reason why these puyments should not be made on a liberal scale. Who is the first mineral lord who will earn the everlasting gratitude of the mining community of Cornwall, and what is, perhaps, of more practical utility, strengthen his own interests by adopting the new principle? 100/. an acre for land, and 1-10th dues on profits, would be fair and reasonable for both parties. Whether the great Penryn Foreshore case will pass through another stage or not remains to be seen. This week it has come begine for the plaintiffs—the Mayor and Corporation of Penryn. It is a reliable to the Crown, or Warxham Exhibition.—The model of the Shropshire lead mining district which obtained a prize medal in the Exhibition of 1822 and the pig of lead with an inscription of the Emperor Hadrian and the spades which give the name to the "Roman" Gravels Mines, are exhibited in this Exhibition, by Mr. Jasper More. The former, from what Sir R. Murchison pronounced its extreme accuracy, forms of valuable source of reference for shareholders in these mines, saving a viitto the district. Mr. H. F. Brion, of 231, Albany-road, London, purposes taking a relievo map of this model, 30 in. long, with the minutest details as to veins, &c., if a sufficient number of gentlemen agree to sabscribe beforehand. Those interested in the matter are requested to communicate with Mr. Brion. has been reached at 90 yards from the surface, and the works are rapidly progressing most satisfactorily.

LEICESTERSHIRE COAL FIELD.—On Monday the Dudley Geological and Scientific Society paid this district a visit, and although the party was rather small the excursion was evidently enjoyed. On leaving Coalville station the first call was made at the Encaustic Tile and Terra Cotta Works, when they were shown round by Mr. Etatt. The party next proceeded to the Whitwick Colliery, where they were joined by the Chairman and directors of the company, and luncheon was partaken of. The large sections of the strata passed through in sinking down to the deep coal, and plans, elevations, &c., of the whole of the new plant now in progress on the surface were inspected. Mr. W. J. Harrison, F.G.S., of Leicester, then gave a short lecture on the coal formation of the district, explained and illustrated by diagrams, which was greatly appreciated by the ladies and gentlemen present. The party next descended the new shaft along with several gentlemen of the district, the Rev. Mr. Tollemache, and others (who had come to join the association), under the escort of Mr. J. Harrison, F.G.S., of Coalville. The gentlemen descended in their black coats and light clothes, and passed through the levels that are now being headed out for the new workings. The roads are 12 ft. in width, and 7 ft. in height, with a magnificent coal roof of 4ft. in thickness, which was greatly admired and commented on by all present. Sections of the coal were cut through in different places to show the thickness of the seam, which continued 8 ft. 2 in. The party was then conducted to the residence of Mr. W. Whetstone, Broomleys, when a grand collation was provided for all present. Sections were afterwards made to the Monastery, the Hanging Stone, Bardon Hill, and various other places of interest in the district. The coal trade in this neighbourhood seems rather quiet, the pits only working half time. The new work at Ellistown and the South Leicestershire Coll

lates entirely to surface procedure.

It is gratifying to find that the losses of our local mines by the winding up of the Copper Mines Association will not be heavy; it is estimated at about 3000%.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

July 27.—The class of finished iron for which South Staffordshire is best and most reputably known—forge bars of high quality—is in more than moderate request. Firms occupying the foremost position in this branch of the iron trade have no difficulty in keeping their forges and their mills on four days and four nights a week. For such iron our maximum quotation of last week (91.12s. 6d.) is readily got for the Earl of Dudley's iron. Best sheets are likewise in slightly improved request. Good boiler-plates of superior brands are selling steadily, and the enquiry for medium and common sheets has not fallen to zero. On the contrary, there are firms who report themselves slightly better off this week than last, but the new orders are not for heavy quantities. Common bars have fallen, together with strips and hoops, to a very low figure. It is now possible to get Staffordshire bars at under 61.10s. It has been a long time since such a quotation ruled, and the wide difference between that price and 91.12s.6d. leads the market to look for ease upon the maximum. Whilst the bar firms outside those of the A1 class do not report any improvement as a whole, makers here and there report a faint im-DURHAM LEAD MINING DISTRICT.—On Monday, July 24, operations were commenced at the Old Dryburnside Mines, near Frosterly, in Weardale; these mines are bounded on the north by the River Wear, on the south and west by the Beaumont and London Lead Company's splendid mines. The Dryburn lodes run direct into these properties. About 80 years since the upper sills and strata were wrought by means of shallow adits, when very large quantities of ore were raised and sold. Influx of water prevented the prosecution below a certain point, and adverse interests stultified unity of action; all these difficulties have been removed, and the works will be undertaken from the level of the River Wear. A deep adit has been partially executed, but from entering other boundaries had been suspended; this will enable the ground to be wrought from an altitute of more than 1200 ft., through the well-known Nattrass Gill, Quarry and other hazels, as well as the first, second, 4-fathom, and 12-fathom limestone. The managemen, has been confided to and undertaken by Mr. George Henwood.

MINING IN CARDIGANSUIRE and the adjoining county may now Whilst the bar firms outside those of the A1 class do not report any improvement as a whole, makers here and there report a faint improvement in the demand from local merchants, but at prices declared to be unremunerative. Pig-iron is abundant, though there is no increase in the local production, which keeps very low. Best pigs hold their own at from 4l, 5s. to 4l. 10s. for all-mine hot-blast; but cinder qualities are plentiful at 2l. 10s., and a good order might be placed at within that figure. From other districts the importations are likewise falling off somewhat for forge qualities, but foundry iron, without being in active, is in less unsatisfactory demand. Good ironstone is more than usually abundant, and is held for prices which will compensate mineowners. The prices offered by pig-making ironstone is more than usually abundant, and is held for prices which will compensate mineowners. The prices offered by pig-making firms who do not get from their own mines all they need leave no margin of profit. It is noteworthy that in connection with the manufacture of pig-iron in South Staffordshire the Cowper method of heating the blast, which has been found so very effective in the North of England, is about at length to be applied. Messrs. Cochrane, of Woodside, are erecting two of Cowper's hot-air furnaces. The effectiveness of the apparatus will be in excess of present requirements, but Messrs. Cochrane anticipate larger requirements hereafter. There ought to be a saving of at least 6 cwts. of coal to the ton of iron produced to compensate Messrs. Cochrane for their extra outlay.

The Coal Trade is more than usually dull, even for July. Much effort is made to uphold or thedox questations for best qualities, but MINING IN CARDIGANSHIRE and the adjoining county may now be causidered not only a fair, but perhaps an unusally advantageous subject for investment; the extraordinary demand for all classes of mining property, caused by the wonderful success of the Van some years since, has had its run, and many worthless schemes have died away. Amongst the remaining mines now at work no doubt there are many that will prove anything but remunerative, but the generality are being fairly developed, and each possesses some peculiar inlication of success, or presents an inducement for further development. The prices also of the various shares in the mines, both dividend and progressive, have come down to something like reason-

The Coal Trade is more than usually dull, even for July. Much effort is made to uphold orthodox quotations for best qualities, but pits makes universal success impossible. Reductions in Thick coal are not seen upon every hand; but they are noted in cases in which weakness is not usually earliest shown. Some consumers might supply their wants at less than a fortnight and three weeks ago by the exigencies of colliery proprietors who intend to carry on their

supply their wants at less than a forthight and three weeks ago by from 1s. to 2s. per ton. Inferior samples are plentiful at from 7s. 6d. to 8s. 6d. for forge qualities.

The Mines Drainage Commissioners have determined to carry out as far as they are able the reports which we summarised last week of the arbitrators—always supposing, however, that they receive such encouragement as they have a right to look for from the colliery converted. The Bibton Committee have determined owners most interested. The Bilston Committee have determined recommend the levying for next year, which begins early in agust, of the maximum rate of 6d. upon all minerals brought up, and to divide it amongst all the people pumping in the district at the rate of so much per lock of 25,090 gallons raised 100 ft. The sum is to be determined by the amount which the rate may yield. Desiring to know if the firms who are pumping will accept these terms, the committee have issued circulars. Meanwhile they have Meanwhile they have terms, the committee have issued circulars. given a fortnight's notice to the firms who are now pumping under subsidy from the commissioners. The maximum rate is likewise proposed to be levied in the Tipton district, and Monday next is

fixed for appeals against ratal under the proposed order. On the following Wednesday there will be an annual election of 10 commissioners. The commissioners who retire are—Messrs. George Addenbrooke, John Aston, Boaz Bloomer, W. V. Dawes, H. O. Firmstone, H. Hall, James Holcroft, Sanuel Minton, W. M. Sparrow, and J. E, Swindell. They are all eligible for re-election. The work of the commissioners seems likely to be aided by a communication which has been addressed to the board by the Government Inspector of Mines for the district, who speaks not only on the great financial loss which the flooding at the mines will occasion, but notices the great risk to human life below ground which would follow such a calamity.

calamity.

Throughout North Staffordshire there are serious complaints about

Throughout North Staffordshire there are serious complaints about the state of the mining and the pig-making industries, but at the mills and forges there are a few more orders, and the hands are employed longer hours.

A depth of 83 yards has been reached at the sinkings on the estate of the Hamstead Colliery Company. What are believed to be the water measures have been passed through. The sinking at the one shaft has been suspended for the present, and a new shaft has been commenced.

commenced.
On Friday last a section of the Institute of Mechanical Engineers commenced.

On Friday last a section of the Institute of Mechanical Engineers visited the celebrated limestone pit of Messrs. Dixon, Burnes, and Co, at Dudley Port. They were met on the surface by Mr. William Bristow and Mr. David Peacock, and the secretary of the party, Mr. Barlow, explained that although a very large party had put down their names most of the members had been unable to attend. The prry then explored one of the finest pits of the kind in South Staffordshire. Great interest attaches to it as being one of the places where the Dudley or Wenlock limestone has been extensively worked below the coal measures of the district. Previous to its opening the only means of supplying the blast furnaces with limestone for smelting was from open workings at Dudley Castle Hill and Wen's Nest, and a little at Walsali. The depth of Messrs. Dixon's pit to the bottom of thick coal is 123 yards and at a depth of 185 yards the coal lies on the Wenlock shale, which is int-mixed with inferior limestone. At a total depth of 220 yards, the party came into the workings, and a most beautiful sight met their view. There were about 15 acres of open workings and roadways, and the pillars supporting the roof were illu nimated with 3840 candles, making a complete fairy spectacle. Various coloured fires were set alight at intervals, and these lit up the massive pillars, 14 ft. square, in a weird and fantastic manner. After tiring themselves in wandering about the extensive workings, the parties proposed a hearty vote of thanks to the firm for their reception of the members, and then a hearty vote was given to Mr. Bristow and its belong-ings. Just before leaving some 20 or 33 shots were fired for the amusement of the visitors, and a large quantity of material was brought down.

REPORT FROM MONMOUTHSHIRE AND SOUTH WALES.

REPORT FROM MONMOUTHSHIRE AND SOUTH WALES.

July 27.—The report this week is not of a more encouraging nature than last. The prices at which orders are offered are in many cases so low that manufacturers are compelled to decline them, and at many of the works the men are employed only short time. A clearance of iron has at last taken place in the direction of Turkey. To Canada a large shipment of rails has been made, and for the Cape, India, and Sweden requirements are in course of execution, but business is very dull. Pig-iron is still in limited request, although a few fresh orders have been recently given out in the district. The Landore Steel Works are yet idle, and no signs of their re-starting are apparent. Generally speaking, although rails are in fair request the steel works are not so actively engaged as was the case a few the steel works are not so actively engaged as was the case a few months ago. At the Tin-Plate Works the restriction of make is maintained strictly. At the same time, buyers are still backward in making purchases, and the prices offered in many cases are far from height remunestive.

maintained strictly. At the same time, buyers are still backward in making purchases, and the prices offered in many cases are far from being remunerative.

The Coal Trade is also depressed. There is a want of tone in the market. Though the output is considerable shipments are not equal to it. Theforeign demand his fallen off slightly, and coastwise business must again be reported as very bad. In the anthracite district, disagreements between the men and their employers have recently occurred in consequence of reductions either enforced or sought to be. At the Wauncaegarwen Collieries the men, it is believed, will be asked to submit to a reduction of 12½ per cent., if not more. They are very disinclined to this, and a meeting of the men has been held, at which it was agreed to adjourn till next week, when a general meeting of the workmen employed in various collieries will be present.

The Cardiff and Swansea Coal Company's report for the year ending April 30 shows a loss, but against this must be put an item for debenture interest charged against revenue. Once the arrangement with the vendors is carried out a large portion of this will not be due. The output from the whole of the pits has been during the year over 200,000 tons.

The inquest on the men killed by the explosion on board the steamship Atalants, at Penarth Dock, has concluded in a verdict of accidentally killed. The explosion was caused by one of the men lighting a match between decks, and which ignited the gas from the steam coal loaded. The chief officer was also blamed for not having used more care with regard to ventilation. The captain admitted that he did not know the cool was of a gaseous nature.

Mr. Thomas Halliday has addressed a long letter to a local paper, in which he speaks in a congratulatory tone of the progress of conciliation as evidenced by the formation of the South Wales Board. Of course he attributes this in a great measure to the working of the Unions, and says he always advised adhering "to the latter, however, is evidently

deputation.

At an explosion in the early part of this week in a new shaft being sank for the At an explosion in the early part of this week in a new shaft being sank for the At the West Mostyn Colliery a splendid seam of coal, 9 ft. thick, has been reached at 90 yards from the surface, and the works are rapidly progressing most satisfactorily.

EXPERIMENTS WITH LITHOFRACTEUR.—Mr. Thos. Whatmough, scort in Sunth West for the sale of lithofreeture, her heap recently.

EXPERIMENTS WITH LITHOFRACTEUR.—Mr. Thos. Whatmough, agent in South Wales for the sale of lithofracteur, has been recently making experiments with this powerful explosion, except when caused by the fuse and its safety from explosion, except when caused by the fuse and detonator. In addition to previous experiments Mr. Whatmough, a few days ago, initiated operations at the Mumbles Limestone Quarries. The first experiment was for the ourpose of illustrating its non explosiveness except in the way prescribed by the instructor. A large bonfire was made, and a 5 lb. box of the lithofracteur was placed in the centre, but it did not explode, thus showing that should the place where ithofracteur is stowed be set on fire no explosion would take place. In a second experiment a extridige was placed with its end on a block of stone, and fired, but no report followed, but the same when fired with a fuse and detonator split the rock in pieces. The next was a tube experiment, showing the advantages of lithofracteur as an excavator. A 2 ft. hole was made in a block of stone of over 100 tons, when 6 lbs. of lithofracteur was put into the cavity and fired, and the stone fairly split in half. Another experiment was tried, without boring, on the other side of the block, and was so successful that it split the stone into fragments. To show the cartridges will not explode by consusion a 5-lbs. package washrown from the top of the block, and was so successful that it split the stone into fragments. To show the cartridge will not explode by consusion a 5-lbs. package washrown from the top of the block, and was so successful that it split the stone into fragments. To show the cartridge will not explode by consusion a 5-lbs. package washrown from the top of the block, and was so successful that the plate of the stone find the cartridge and one portions of it were those was littled, and some portions of it were thrown 309 yards out to sea. A subsequent examination showed that the rock was shaken from its base to the top of the hill, and

REPORT FROM DERBYSHIRE AND YORKSHIRE.

July 27.-Coal mining is by no means such a profitable business as it has been, and colliery owners in Derbyshire now complain not only of the low price at which they are obliged to sell, but of the very moderate business that is being done. So much is this the case that at many large collieries the men are not working more than four days a week, and at some even less than that. The demand for London is very quiet, and the competition for what trade there is particularly keen. Not so much is being done with the West and South of England the consumption having fallen off very much of London is very quiet, and the competition for what trade there is particularly keen. Not so much is being done with the West and South of England, the consumption having fallen off very much of late. There has been a better enquiry for steam coal, but considering that this is the best part of the year for that description of fuel there is not so much doing as might be expected, whilst prices have not advanced. Engine fuel is plentiful, and is being sent from the neighbourhood of Staveley, and other places as well, into Lancashire by the Muncaster and Sheffield Railway. At Sherland the men appear to be working tolerably well, and as co-operators, no doubt, are looking forward to future benefits. These, it is to be feared, they are not likely to reallse, for as the colliery has hitherto been worked at a loss when the price of coal was much higher than it now is it does not appear quite clear how it is to pay now. We are promised some very active competition between the Midland and Great Northern Railway Companies for the minest traffic to London and the South. The new lines of the Great Northern from Nottingham and Pinxton is all but ready for being gone over by the Government Inapeacor.

With the Assessivan of one or two of the heavy branches, the Sheffiel I trade is it Inspector. The the exception of one or two of the beavy branches, the Sheffiell trade is very depressed state, and many hands are working short time. In armour

JULY

REPORT FROM THE FOREST OF DEAN.

July 27.—Some profess to observe improvement in the output and trade in coal in one or two instances of the Forest pits, but by thingling with the workers we have failed to obtain evidence corroborative that such is the case. Indeed, if there be any improvement it is so slight that it is scardely worth taking into account. The work found the men does not average half-time, how then, or wherein, is there improvement? No one would weldome improvement more than ourselves, but we fail to see the benefit of the wisdom of infating present circumstances with fetitious conceits of improvement. We cannot find it, and, therefore, shill not report that such is the case. Still we believe that some little revival of trade will shortly take place, but see no grounds for hoping for anything very striking in trade activity occurring just yet. In two or three months time we may be able to read trade indications with more distinctness and certainty, but at present we think that we only anticipate as near some slight revival. Last Saturday an additional furface was blown out at Parkend, and rumour asserts that the Parkend Ccal Company has given notice to their men at Brockhall Ditches Collery that work will dease there on Any. 2. And since our last there has been a temporary str ke at East Slade Collery, on the ground that the New Bowson Company paid nothing for getting lime cdal, although the company was selling the article at 5s. per to., and that the grievance had been argemented by the company having the bars of the verees put wider apart, so as to admit of a larger quantity passing through, and in that way entailing a greater loss to the workmen. It seems nothing but right that the men should be paid for all regular labour, but at such rates as may be agreed upon between employer and workmen. Sorne arrangement, we understand, has been arrived at, and most of the men are again at work (so far as employment runs in these dull times), but full satisfaction has not been shown on the part of the m

THE SCOTCH MINING SHARE MARKET-WEEKLY REPORT AND LIST OF PRICES.

THE SCOTCH MINING SHARE MARKET—WEEKLY REPORT

AND LIST OF PRICES.

During the past week the market has continued very quiet. In chards of iron and coal concerns, excepting a reduction of 2l. on Nant-y-Glo and Blaina (pref.), the movements are all in an upward direction. Arniston having advanced 5s. Glasgow Port Washington, and Scottish (or (pref.), 3s.; Benhar, Glasgow Port Washington, and Scottish Australian, each 2s. 6d.; Marbella, 1s. 6d.; and Monkland (pref.), 1s. Cairntable better, at 8 to 8s; but Morlkland unlatered, at 45s. Lilland age at 51s. An Irew Knowles and Sans, 30s. prem. Blison and Criting, 1to 8. Beckey, 7 augilan, 8, 34s; to 38s; Cardiff and Swansed, 35s. to 4 : Chapd Rouse, 48s. to 3s. Chen 1ll., 1s. 5d.; sellers. John Bignal and Sons, 5. Chapd Rouse, 48s. to 5s. Chen 1ll., 1s. 5d.; sellers. John Bignal and Sons, 5. Chapd Rouse, 48s. to 5s. Chen 1ll., 1s. 5d.; sellers. John Bignal and Sons, 5. Chapd Rouse, 48s. to 5s. Chen 1ll., 1s. 5d.; sellers. John Bignal and Sons, 5. Chapd Rouse, 48s. to 5s. Chen 1ll., 1s. 5d.; sellers. John Bignal and Sons, 5s. 4s. 5d.; sellers. John Bignal and Sons, 5s. 4s. 5d.; sellers. John Bignal and Sons, 5s. 4s. 5d.; sellers. 1s. 5d.;

plates and munitions of war a fair amount of business is being done, whilst the Resemer rail mills have been running tolerably well. Table and spring knives, saws, and dies are very quiet, but little is being done on foreign account. The leading milled heestaldistiments continue to be well employed, whilst the foundries are by no means so busy as they have been. Ordinary plices are The productive request, and there does not all might be were there a better dem mill. It is likely, become that the before bug there will be a large quantity of fine Spunish ironstone beoneyer, that before bug there will be a large quantity of fine Spunish ironstone become that the before bug there will be a large quantity of fine Spunish ironstone become activity with respect to steam sorts. Still, our exports from the ports of Hull and Grinding period of last year.

At Manvers Main work has been resumed after a strike lasting fully three months, and on terms which the men might have had for asking before they went out. On Wednesslay an effort was made to bring the dispute at the Swaithe and Edmunds Main Colliery to a termination, and it is expected to be successful. The dispute, like that at Manvers Main, relates to the price paid for getting coal by weelging, as gunpowder has been abolished in nearly all the extension of the modern of the stream of the longes in Derbyshire have severed all connection with it.

REPORT FROM THE FOREST OF DEAN.

July 27.—Some profess to observe improvement in the output grid in the workers we have falled to obtain evidence corroborative that such is the case. Indeed, if there be any improvement is its as slight that it is scarcely worth, taking into account. The bridging with the workers we have falled to obtain evidence corroborative that such is the case. Indeed, if there be any improvement in the source of the province of the previous of the previous of the province of the previous of the previous o

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	Pe	Г	Pa	id	pe	r an	nun	1.	Last
	share		up.	P	revis	0118.	Las	t. COAL, IRON, STEEL.	price.
1	210		£8		€10			Arniston Coal (Limited)	734
1	10	***	10		14			Benhar Coal (Limited)	
. 1	10	***	7	***			9	Dist.	10%
١		***		*00	14	***		Ditto	.7
- 6	100	***	40		123	9		Bolckow, Vaughan, and Co. (Lim,) A.	49
ı	10	***	10	***	10		10	Cairntable Gas Coal (Limited)	8
1	10		10	***	5			Chillington Iron (Limited)	416
ı	3:2		29		7	***	1/4	t. Ebbw Vale Steel, Iron, and Coal (Lim.)	101/2
1	10	***	6	***	nil	***	nil	Fife Coal (Limited)	31/2
1	10		10		-3			Olas town Book West in the Tree & Contact	
1		100		0.00		***		Glasgow Port Washington Iron & Coal(L)	419.
1	10	000	10		-	000	meth.	Ditto Prepaid	449.
1	10		10	***	-	***	-	Lochore and Capledrae (Limited)	63/4
1	10	***	10		mil	***	nil	Marbella Iron Ore (Limited)	6?s. 6d.
ł	10		10	***	mil		nil	Monkland Iron and Coal (Limited)	45s.
1	10		10		7	100	7	Ditto Guaranteed Preference	90s.
١	100	***	100		nit		nil	Nant-y-Glo & Blaina Ironworks pref. (L)	25
1	8		5		15		lia		35s.
ì		***		***				Omoa and Cleland Iron and Coal (Lim.).	
1	1		1		12%	2	15	Scottish Australian Mining (Limited)	
1	I	060	₹ 5		125	2	15	Ditto New	5s. 6d.
î	50		59	***	20	***	5	Shotts Iron	53
Î	10		10		10		5	Ditto New, issued at 21/2 prem.	934
Į			-						- /4
ı								PFER, SULPHUR, TIN.	
ł	4	000	4		-	***	1000	Canadian Copper Pyrites (Limited)	18s.
1	4		3	***		111	_	Ditto (£3 paid)	5s.
ł	10		7		20s	ā	20.	. Cape Copper (Limited)	33
1	2	***	2		-		-	Dunsley Wheal Phomix Tin (Limited)	9d.
ł	1	***	1	***	125	1000	15	Glasgow Caradon Copper Mining (Lim.).	
1	î	***		***				Glasgow Caradon Copper at ming (Lim.).	
1			159		12%	3	105	Ditto New	20s.
1	10		9	***	-	999	nii.	Huntington Copper and Sulphur (Lint.).	199.
ł	258.		20s.	***	-		-	Kapunda Mining (Limited)	2d.
ł	4		4		er/fix		-	Panulcillo Copper (Limited)	85a.
Ì	10		10	174	61		61	Rio Tinto (Limited)	8
1	20	***	20		-	***	-	Ditto, 7 per cent. Mortgage Bonds	14
1	105		100		-			Do., & p.ct. Mor. Deb. (Sp.Con. Bds.)	56
ì		***	10	***		100	-11	Parentes Cotton (Firster)	
1	10	***		***	nti	900	nil	Russian Copper (Limited)	554.
ŧ	10		20		25			Tharsis Copper and Sulphur (Limited)	2036
1	10		7	***	25		235	Ditto New	131/4
П	1	***	1	***	with	***	-	Yorke Peninsula Mining (Limited)	7s. 6d.
1	1		1		-		1000	Ditto, 15 per cent. Guaranteed Pref	
ı	-		-						.,
Ł								GOLD, SILVER.	
Ł	1	***	1		5		5	Australian Mines Investment (Limited).	5s. 9d.
1	20		20		-		_	Emma Silver Mining (Limited)	12s. 6d.
ŧ	10	***	10		-	***	_	Flagstaff Silver Mining (Limited)	304.
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1			Las	t da	y for	r thi	8 80	count August 12; settling day, August 16.	

Last day for this account August 12; settling day, August 16.

Note.—The above lists of mines and auxiliary associations is as full as can be ascertained, Scotch companies only being inserted, or those in which Scotch investors are interested. In the event of any being omitted, and parties desiring a quotation for them and such information as can be ascertained from time to time to be inserted in these lists, they will be good enough to communicate the name of the company, with any other particulars as full as possible.

Post Office Buildings, Stirling, July 27.

TRADE OF THE TYNE AND WEAR.

July 27.—There is no particular change to notice in connection with the coal and iron trades. The arrangement which has been made respecting the great ironworks in Cleveland has given much satisfaction, and there is a more confident feeling now pervading the trade. There is no doubt that the Cleveland iron trade, dull as it is reported, is quite sound and healthy, although at the present moment only works favourably situated can realise profits. The pig-iron trade continues on a good scale. The demand for shipping, both coastwine and foreign continues good and the make of night. both coastwise and foreign, continues good, and the make of pigiron is large.

The market at Middlesborough on Tuesday seemed rather more reassure 1 after the uncertainty which prevailed during last week with regard to the stability of certain firms. The distrust has not wholly disappeared, and sellers are rather reticent in doing fresh business. The removal of danger in connection with the affairs of Messrs. Thomas Vaughan and Co.'s very extensive works will probably pave the way to the departure of all uneasy feelings, as, indeed, has already been done in a large measure, and there seems no reason to doubt that the confidence which has almost uninterruptedly reigned in the district throughout the bad times will be last market have since been maintained and even exceeded for foundry iron, which not merely for local account is chiefly in request, but also for shipments. Compared with the extensive make which is still proceeding there is but a small increase of stocks, the great bulk of the iron finding a ready market either at home, in Scotland, or on the Continent. The quotations are about - No. 1, 49s. 64.; No. 3, 48c. to 48s. 34.; No. 4, forge, 43s. 46. to 43s. The manufactured iron trade shows little change; there is no improvement. There is no change in the quotation for finished iron. The notices to biast-turnacemen expire at the end of the week. The Coal Trade shows no alteration. Coke is quoted 12s. to 14s. per ton, delivered at the Cleveland furnaces. Manufacturing coal unaltered. The market at Middlesborough on Tuesday seemed rather more

DIAMOND BORING MACHINE.

A NY PERSON prepared to CONTRACT to TEST the STRATA for MINERALS in the HILLY PARTS of LANCASHIRE, may apply to Mr. James Hitchon, Surveyor, Burnley, L. neashire.

TO IRONMASTERS, MINE OWNERS, BROKERS, &c FOR SALE, the STOCK, PLANT, and LEASE of a HEMATITE MINE on the WEST COAST. None but responsible parties treated with. resent depression taken into consideration in selling price.
Address, "Hematite," MINING JOURNAL Office, 26, Fleet street, London

WANTED, a GOOD WELL-APPOINTED GOING COLLIERY
in SOUTH YORKSHIRE or DERBYSHIRE. Price ranging from
Address, with full particulars, to "C. V. D." full particulars, to "C. Y. D.," MINING JOURNAL Office, 26, lon, E.C.

BLENDE ORE.

WANTED, FOUR TO FIVE THOUSAND TONS OF BLENDE ORE, of GOOD QUALITY.

Address, stating price, terms, and average percentage (or an analysis of the ore), to "A. Y. Z.," MINING JOURNAL Office, 26, Fleet-street, London. E.C.

LEAD MINE.

WANTED, an AGENT for a LEAD MINE. Must be thoroughly acquainted with the PRACTICAL WORKING of VEINS in the LIMESTONES, &c., of the NORTH OF ENGLAND, and must also have had experience with PUMPING MACHINERY.

Apply to Mr. J. H. Robinson, 232, Westgate-road, Newcastle-on-Tyne.

WANTED, a SITUATION as AGENT or MANAGER— Has had the management of mines at home and abroad. Is proficient in V ■ Has had the management of mines at home and acroad-saying, Analysis, Dialing, and Mapping.
Address, "M. E.," MINING JOURNAL Office, 26, Fleet-stress, London, E.C.

TAKE NOTICE that the BRITISH DYNAMITE COMPAN (LIMITED) have recently INSTITUTED PROCEEDINGS in CRIA. (LIMITED) have recently INSTITUTED PROCEEDINGS in CRIA. THE PERSONS named therein as DEFENDATE from MANUFICELLING RECEIVED AND ADDED TO A DEFENDATE FROM MANUFICELLING RECEIVED AND THE PERSONS named therein as DEFENDATE from MANUFICELLING RECEIVED AND THE PROCEEDINGS OF THE PROCEEDING OF THE PROCEEDING OF THE PROCEEDING OF THE PROCEEDINGS OF THE PROCEEDING OF THE PROCEDURE OF THE PROCEEDING OF THE ruary, 1869.

J. AND R. GOLE, 49, Lime-street, London, E.C.

Solicitors for the British Dynamite Company (Units)

Bolletters for the British Dynamite Company (Limited).

ITHOFRACTEUR,—This article is FAR SUPERIOR in POWER and EFFECT to DYNAMITE, and is now receiving public the Patantees are prepared to SUPPLY ANY QUANTIFE, from their works and they are happy to inform their friends and the public, that the Patantees are prepared to SUPPLY ANY QUANTIFE Trom their works and ANOFACTURE AND SALE HAVE NOT BEEN RESTRAINED, but the standing the proceedings by the British Dynamite Dompany. These were menced in October, 1875, and notice of trial was only given on 11th suly, 187, and then only after application by the company for further time. These facts the solicitors of the company did not mention in their advertished which appeared in the Mining Journal of 22nd July 1884.

Application to be addressed to—Mesers, KREBS BROTHERS AND CO., 22, Basinghall street, London.

NEW CHIVERTON CONSOLIDATED LEAD MINING

COMPANY.

A L L C L A I M S upon the above company HAVING BERY
DISCHARGED, I hereby give notice that the LIQUIDATION OF THE
COMPANY is CLOSED.

4, Birchin-lane, London, July 24, 1876.

LEAD MINING
A. ROSS, Liquidator,

TO THE CLAY TRADE.

A GENTLEMAN, having had a year's experience on a large CLAY WORKS is willing to LEND HIS SERVICES for the FIRST THREE MONTHS, with or without remuneration. First-class references given and pected.
Address, "D. C. L.," MINING JOURNAL Office, 26, Fleet street, London.

SCHOOL OF ENGINEERING AND PRACTICAL

SCHOOL OF ENGINEERING AND PRACTICAL SURVEYING.

A THOROUGH COURSE OF INSTRUCTION given in the abore subjects, embracing also PRACTICAL MATHEMATICS and M. CHANICS. LECTURES given in GEOLOGY, MINERALOGY, CHEMISTRY, &c., by eminent men. Resident or non-resident pupils received.

High-class references and terms to be had on application.

Address, "C.E.," Stoneley House, Howard-road, South Norwood, London, & E.

MANGANESE AND SULPHUR ORES.

MESSRS. BROWN. BUTLER, AND CO.,
ARE OPEN to TREAT for the PURCHASE of LARGE QUANTITIES of the
ABOVE or other MINERALS, to be delivered in Liverpool.
Address, with particulars, stating quality and price, to Brockley Building,
South John street, Liverpool.

LONDON OFFICES: 109, UPPER THAMES STREET, E.C.

PROSPECTUSES OF THE TREGARDOCK UNITED MINING ASSOCIATION

(LIMITED)

May be obtained at the Bankers, the East Cornwall Bank, Bodmin, and t London Agents, Messrs. Williams, Deacon, and Co., Birchin lane, Lou E.C., and at the Company's Offices, 4, Lothbury, Bank, E.C.

DOLGOCH SLATE AND SLAB COMPANY (LIMITED).

Capital £30,000 in 3000 shares, of £10 each. Deposit, £1 on application, £2 on allotment.

Established for working the veins of slate under Dolgoch Farm, 1/4 mile were of the celebrated Bryn-yr-Eglwys Quarries, Towyn, Merionethshire.

The following are extracts from the reports:

"As a manager of a slate quarry of 23 years standing, I give it as my opinion that the quality of the rock is as good and the split as fine as that of any quarrier Festiniog, while the waste will be less than that of most of those quarries."

Votty and Bowydd Quarries, Festiniog, April 27, IELLAM ROWLANDS,

Aberystwith Enamelled Slate Works, April 29, 1876.—"In this purpose to Aberllyfenni Slate Rock." ELLIS and OWEN.

Prospectuses, forms of application for shares, and full information made to tained of the Secretary of the Dolgoch Slate Company, Aberdovey, Meriosch, or Messrs. HARRISON and BONNOR-MAURICE, Welchpool; or Messrs. FALLOSS my BROWN, 4, Lancaster-place, Strand.

BRADWELL MOSS RAKE MINING AND LEAD ORE SMELTING COMPANY. (LIMITED).

THIS COMPANY'S MINES extend for more than half-a-mile on one of the strongest LEAD VEINS in DERBYSHIRE. In driving its adit level, running in part through the old men's workings, there have been raised and sold upwards of £1200 worth of ore, and the ore is exceptionally rich. The mine has a NEW SIEAM BNGINE, BOILER, and oRUSHING MILL, and other appliances, and the main shaft has been already sunk 15 yardsbedom adit level, so as to get under the old men's workings; and it is the opision of the miners of the nelgibourhood that when sunk a little deeper and the level driven an immensely profitable mine will be laid open. The working and marangement are most economical, for the mines have been obtained and developed and new machinery bought and creeted on a capital of 4000 shares, of £1 each.

To develope the mines more rapidly. TWO THOUSAND additional SHARES have been created, and part are OFFEIRED to the PUBLIC at pir price of £1 each. The first applicants will receive allotment, and any desirous of emusking is sound profitable investment should apply at once, before the shares rise to got premium, which they cannot fail shortly to do.

Payment must be made of 10s. per share on application, and 10s. on allotment. Letters to be addressed, and orders or cherupes made payable, to the Vise Chiman, Mr. James Burnes, at the office of the Secretary, Mr. Thomas Brombart, radwell, near Hops, Derbyshire.

LAMBERT,

MESSRS. KEENE AND LAMBERT.

STOCK AND SHARE BROKERS,
METROPOLITAN BUILDINGS, 63, QUEEN VICTORIA STREET, EC.
Bankers: London and Westminster Bank, Lothbury.

M ESSRS. T. VOSPER AND MINERAL AND GENERAL ESTATE AGENTS 48, FINSBURY CIRCUS, LONDON.

T. V. and Co. have ON OFFER several Freehold Estates, Collierles, China(b).
Slate, and Lead Properties, direct from owners.
Shares in the Neptune Copper Mine may be relied on as a good invented at present prices. They have also Shares in two or three Lead Mines in Will worth the attention of investors.
Business is being done privately in the undertakings referred to, and invaks will find them worthy their attention.

MESSES. W. J. TALLENTIRE AND CO.,
STOCK AND SHARE BROKERS.
20, CHANGE ALLEY, CORNHILL, LONDON, E.C.,
Transact business in Stock Exchange Securities and Mining Shares of every description, either for immediate cash or the usual bi-monthly settlements, and fored active personally or by letter to executors, trustees, capitalists, and investor experience of the markets, extending over a period of more than sixten year, together with special facilities for acquiring information, enabling them is at beneficially for clients.

They have established Corresponding Agencies in all the principal toward of the United Kingdom, and are prepared to deal in the various local Stocks and shad at close prices. Orders per post or telegraph reveive property attention.

at close prices. Orders per post or telegraph received

INVESTORS SHOULD APPLY for a copy of Messrs. W. J. TALLENITE at Co.s Circular, sent post free. It contains valuable information of Foreign Stocks (especially South American, Egyptian, and Turkish), Rallways, and less Mines.

C APTAIN ABSALOM FRANCI MINING AGENT, ENGINEER, AND SURVEYOR GOGINAN, ABERYSTWITH.

CONSOLS, RAILWAY STOCKS, FOREIGN BONDS, and ever description of SECURITIES PURCHARED and SOLD, for each of description of SECURITIES PURCHASED and SOLD, for each of Security, by Messrs. THORNYCROFT AND CO., 20, BROCKLEY BUILDING, SOUTH JOIN STREET, LIVERPOOL. SPECIAL BUSINESS in SHARSI all the principal HOME and FOREIGN MINES, in connection with which diese to investments the experience of nearly half a century enables Messr. Research A selected list of DIVIDEND PAYING SECURITIES and INVESTMENT FOR A RISE forwarded on application.

OR & RISE forwarded on application.
Bankers: The Adelphi Bank, South John-street, Liverpoel.

MONEY ADVANCED, in sums of £500 and upwards, of FREEHOLD or LEASEHOLD PROPERTY, SHARES, STOCKS, and Address Transport and Co. According to the Values, Manual Stocks, and Co. According to the Values, Manual Stocks, Ma Address, THORSYCREFT and Co., Accountants, Mortgage, Brokers, Valers, & Ereckley Buildings, South John street, Livercool

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PENPOLL SMELTING WORKS,
POINT, NEAR TRURO, CORNWALL,
TO BE SOLD, OR LET,
To BE SOLD, OR LET,
we ralvable Smelling Works, with very commodious and convenient Premises,
and all necessary Plant and Machinery, constructed on the most approved
and all necessary Plant and Machinery, constructed on the most approved
and all necessary Plant and Machinery, constructed on the most approved
and in full working order, and whereon a large Tin Smelting
species has been carried on for many years.

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HE ABOVE VERY VALUABLE PROPERTY TO BE HIS ABOVE VERY VALUABLE PROPERTY TO BE HIS POSED OF, BY PRIVATE TENDER, or LEASED, for such term, DISPOSED OF, BY PRIVATE TENDER, or LEASED, for such term, level is a full valuer supply, and the MACHINERY include an excellent 12 in. here is a full valuer supply, and the MACHINERY include an excellent 12 in. here is a full valuer supply with 6 to DOLLER, crushers, stamps, frames, indist, formace, moulds, crances, trucks, hutches, fire-brick, timber, several tons (dis, formace, moulds, crance, tools, and all the requisites of a tin smolting burney, smiths tools, assayers tools, and all the requisites of a tin smolting burney.

I jees, smalls tools, and expense the premises could be adapted for the wish very little alteration and expense the premises could be adapted for the arrying on of the manure trade, or any other mercantile business, and for which her offer a spleudid opportunity.

Are offer a spleudid opportunity.

The premises are situate between Troro and Falmouth, and are easily and at all the premises are situate between the Devoran branch of the Truro large accessible to shipping, being situate on the Devoran branch of the Truro large accessible to shipping,

green accession of the Devoran branch of the Truro (street, and to treat for the same, policion should be made, on or before the 19th day of August next, to Mr. (1910) Mr. Auctioneer, Lemon street, Truro; or to the 19th day of August next, to Mr. (1910) Mr. (1910)

SPELTER WORKS.

SPELTER WORKS.

BE SOLD, the LEASE and PLANT of the UPPER WORKS,
BAGILUT, FLINTSHIRE, extending over about TWENTY-SEVEN
BAGILUT, IS AND TO A QUARTER ACRES OF FRESHOLD
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sere are extensive buildings for storing biende, and heated rooms for making and soing norts.

The works are now in operation, and with a production of only about 11 tons of the works are now in operation in the immediate neighbourhood, and the sear are several collieries in operation in the immediate neighbourhood, and the sear are several collieries in operation in the immediate neighbourhood, and the sear are several many and the sear are several many and the sear are several many and the search of the North Wales blende-producing mines.

The freshold land above mentioned almost adjoins the lesschold property, and is searched on tires sides by a large colliery, the Dee Bank Wharf named above, and healier Dee respectively. The present of the Bagille Railway Station. The site 5, therefore, an unusually favourable one for the erection of works.

Apply to H. C. CARVER, Llaniques, Montgomeryshire.

NORTH WALES.

TO SLATE QUARRY PROPRIETORS, CAPITALISTS, AND OTHERS

TO SLATE QUARKY PROPRIETORS, CAPITALISTS, AND OTHERS.

OR SALE BY PRIVATE TREATY, a VERY VALUABLE SLATE AND SLAB QUARRY, situates at BETTWS-Y-COED, NORTH WALES, and within one mile of the railway station.

The quarry produces slabs of the largest size: the slates are in great demand: the medinery is unequalled in Wales; and the water power is ample. For interior, Rivi.

TALYBONT SILVER-LEAD MINING COMPANY

(LIMITED).

RIVE HUNDRED SHARES TO BE SOLD, UNDER PAR.—

A GENTLEMAN IN WANT of a FEW HUNDRED POUNDS for immidite use is OPEN to RECEIVE an OFFER. The shares are 20s. The properts of the mine are excellent; see all the reports in the Mining Journal.

Address, "Talybout," Messrs. Deacon's, Leadenhall street, London.

TO PROMOTERS OF MINES.

ONE-FIFTH of a new SILVER-LEAD and COPPER SETT TO BE DISPOSED OF to any gentleman who wilt undertake to sell it, or For further particulars apply to "S.," Post Office, Combmartin, near Barn-

COPPER MINE.

TO BE LET, FOR A TERM OF YEARS, A COPPER MINE.—
For further particulars, address Mr. T. Evans, Engineer, St. David's, embrokeshire,

TOR SALE, TWO of SHOLL'S DIRECT-ACTING PNEUMATIC GOLD QUARTZ STAMPERS, made expressly for the Foreign Market. Da be seen at work at the Savile Street Foundry, Sheffield. Address, "Stamps," 63, Cranworth-street, Manchester.

N SALE, TWO CORNISH BOILERS, 30 ft. by 7 ft. diameter Two flues through each. Safe at 60 lbs. pressure working. pply to Henry Parkinson, Foundry-street, Bolton.

SALE, ONE PAIR of 18 in. high-pressure HORIZONTAL ENGINES, for winding, fitted with slot link motion. First-class pair of

Apply to HENRY PARKINSON, Foundry-street, Bolton.

ON SALE, ONE PAIR of 15 in. HORIZONTAL WINDING ENGINES, with slot link motion. Will be sold cheap.

Apply to Henry Parkinson, Foundry-street, Bolton. ON SALE, ONE 25-horse power double cylinder PORTABLE

ENGINE, fitted with slot link motion for winding.

ONE 20 liorse power double cylinder PORTABLE ENGINE.

Will be sold cheap, and are in first-class order.

Applyto HENRY PARKINSON, Foundry-street Boiler Works, Bolton, Lancashire.

O'N SALE, ONE 8-horse power PORTABLE ENGINE, fitted worth winding drum; slot link motion; made by Clayton and Shuttle-Apply to HENRY PARKINSON, Foundry-street, Bolton.

ON SALE, ONE PAIR of 25 inch. coupled HORIZONTAL WINDING ENGINES, with drums and brake gear. Also ONE PAIR of Apply to H. PARKINSON, Foundry-street, Bolton.

ON SALE, ONE strong well-built condensing BEAM ENGINE, by a first clars maker, equal to new; cylinder 36 in. bore, 5 ft. stroke. Can be seen standing, and will be sold cheap. ONE close-built self-contained condensing BEAM ENGINE, stands on independent bed on six columns; cylinder 25 in. bore, 4 ft. stroke. As good as new. Can be seen standing, and will be sold disan.

Apply to HENRY PARKINSON, Foundry-street, Bolton.

DOLLERS ON SALE.—FOUR GALLOWAY'S PATENT MODELERS, 30 ft. by 7 ft., safe to work at 70 lbs. on the square inch. MODILERS, 28 ft. by 7 ft., with two flues through. ONE BOILERS, 26 ft. by 7 ft., two flues through. ONE BOILER, 20 ft. by 7 ft., two flues through. ONE BOILER, 18 ft. by 6 ft., one flue through.

several smaller sizes.
To HENRY PAREINEON, Foundry-street, Bolton.

ON SALE, ONE 16 horse power double cylinder PORTABLE

ENGINE, for winding.

DNE 12 horse power PORTABLE ENGINE,
DNE 16 horse power PORTABLE ENGINE.
DNE 8 horse power PORTABLE ENGINE.
DNE 6 horse power PORTABLE ENGINE.
Epsal to new, and will be sold cheap.
The plant to new, and will be sold cheap.

NSALE, ONE PAIR of 25 in. horizontal WINDING ENGINES.

ONE PAIR of 18 in. horizontal WINDING ENGINES.

ONE PAIR of 16 in. horizontal WINDING ENGINES.

ONE PAIR of 16 in. horizontal WINDING ENGINES.

ONE PAIR of 15 in. horizontal WINDING ENGINES.

ONE PAIR of 12 in. horizontal WINDING ENGINES.

ONE PAIR of 10 in. horizontal WINDING ENGINES.

ONE PAIR of 7 in. horizontal WINDING ENGINES.

The above engines are now ready for delivery, and fitted with winding drum and brake gear to each pair of engines.

Apply to HENRY PARKINSON, Foundry street, Bolton.

FOR SALE. BY PRIVATE BARGAIN, a DIRECT-ACTING OF BULL-DOG BLOW-THROUGH CONDENSING PUMPING ENde, at PR No. 2, TORBANE BOGHEAD COLLIERY, BATHGATE.

The engine can be seen at the pt.

The engine can be seen at the pt.
For price, apply to JAMES RUSSEL and SON, Falkirk, N.B. OR SALE, a 18-horse power PORTABLE STEAM ENGINE,

th link motion reversing goar, ready for delivery.

The power PORTABLE.

OTHER POWER VERTICAL STEAM ENGINE, with link motion reversing

gear to wind and pump. PAN MORTAR MILL, VERTICAL ENGINE, and BOILER. BARROWS AND STEWART, ENGINEERS, BANBURY.

S ULPHATE OF BARYTES FOR SAL fine Line and Metallio Oxide. Samples on amplication to SALE .-

pies on application to— RUTHWAITE BARYTES MINING COMPANY, WHITEHAVEN.

In the Court of the Vice-Warden of the Stannaries, Stannaries of Devon.

IN the MATTER of the COMPANIES ACTS, 1862 and 1867, and in the MATTER of the GIRT AND HOLSTON DOWNS MINING COMPANY (LIMITED).—The Vice-Warden has, by an Order made in the above Matter, bearing date the 18th day of July instant, APPOINTED JOHN HENRY HAMLEY, of Truro, within the said stannaries, an Officer of the said Court, to be absolutely the OFFICIAL LIQUIDATOR of the ABOVENAMED COMPANY.

Dated Registrar's Office, Truro, 21st July, 1876.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Devon.

IN the MATTER of the COMPANIES ACTS, 1862 and 1867, and in the MATTER of the GIRT AND HOLSTON DOWNS MINING COMPANY (LIMITED).—Notice is hereby given, that ALL CREDITORS of the ABOVE-NAMED COMPANY are required, on or before the 9th day of August next, to SEND IN their NAMES and ADDRESSES, and the AMOUNTS and PARTICULARS of their SEVERAL CLAIMS, to JOHN HENRY HAMLEY, the Official Liquidator of the said Company, at the Stannaries Court Office, in Turro, within the said Stannaries. FREDERICK MARSHALL, Registrar. Dated Registrar's Office, Truro, 21st July, 1875.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

Stanharies of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the WEST GWENNAP CONSOLS MINING COMPANY.—Notice is hereby given, that a PETITION for the WINDING UP of the above-named company by the Court was, on the 24th day of July instant, presented to the Vice-Warden of the Btannaries, by William Husband, Francis Harvey, and Nicholas James West (carrying on business at Hayle, within the said Stannaries, as General Merchants, under the style or firm of "Harvey and Co."), shareholders, and claiming to be also creditors of the said company, and that the said petition is directed to be head before the Vice-Warden, at the Prince's Hall, in Truro, within the said Stannaries, on Tuesday, the 8th day of August instant, at Eleven o'clock in the formoon.

Any contributory or creditor of the company may appear at the hearing and oppose the same, provided he has given at least two clear days' notice to the petitioners or their solicitors of his intention to do so, such notice to be forthwith forwarded to P. P. Smith, Esq., Secretary of the Vice-Warden, Truro.

Every such contributory or creditor is entitled to a copy of the petition and affidavit verifying the same, on payment of the regulated charge per folio.

Affidavits intended to be used at the hearing, in opposition to the petition, must be filed at the Registrar's Office, Truro, on or before the 5th day of August next, and notice thereof must at the same time be given to the petitioners or their solicitors.

HODGE, HOCKIN, AND MARRACK, Truro, Cornwall.

Dated Truro, July 26, 1878.

In the Court of the Vice-Warden of the Stannaries.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

Stannaries of Cornwall.

In the MATTER of the COMPANIES ACT, 1862, and of the NORTH WHEAL CROFTY MINING COMPANY.—TENDERS will be RECEIVED by the Official Liquidator of the said company, at the Stannaries Court Office, in Truro, in the county of Cornwall, on or before the 9th day of August next, stating the HIGHEST PRICE which will be given for the 80 incylinder PUMPING ENGLINE, 9th stroke in cylinder, and 7t. 9 in. in staft, with FIVE 10 ton BOILERS attached; and the 24 in. WINDING ENGLINE, with fly-wheel, ONE 5 ton BOILERS and large WINDING CAGE attached, now being in and upon the North Wheal Crofty Mine, in the parish of Illogan, within the said Stannaries, and belonging to the said company, at the Stannaries Court Office, Truro.

(Agents for Tufnell Southgate, 7, King's Bench Walk, London, Solioitor for the Official Liquidators).

Dated Stannaries Court Office, Truro, July 25th, 1876.

In the Court of the Vice-Warden of the Stannaries.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the NORTH ROSEWARNE MINING COMPANY.—TENDERS will be RECEIVED by the Official Liquidator of the said company, at the Stannaries Court Office, in Turo, in the county of Cornwall, on or before the 9th day of August next, stating the HIGHEST PRICE which will be given for the 30 in. PUMPING ENGINE and BOILER, now being in and upor the North Rosewarne Mine, in the parish of Gwinear, within the said Stannaries, and belonging to the said company.

proper the above, apply to Mr. WILLIAM HUTHNANCE, of Rosewarne, Gwinear aforesaid; and for any further particulars to Mr. JOHN HENRY HAMLEY, the Official Liquidator of the said company, at the Stannaries Court Office, Truro.

(Solicitors for the Official Liquidator.)

Dated Stannaries Court Office, Truro, July 25th, 1876.

PENZANCE, AUGUST 3RD.

MINE SHARES FOR SALE.

M. W. HOSKEN RICHARDS (Auctioneer) WILL SELL, BY AUCTION, on Thursday, the 3rd August, 1876, at Four o'clock in the afternoon, at the Western Hotel, Penzance,

TWO (200ths) SHARES in the

FAR-FAMED BOTALLACK MINE,

ST. JUST, CORNWALL.

Further particulars of the Auctioneer, 54 and 55, Causeway Head, Penzance.

Dated 22nd July, 1876.

IPPLEPEN, SOUTH DEVON. TO MARBLE MERCHANTS, LIME MERCHANTS, AND OTHERS.

MESSRS. RENDELL AND SYMONS have been instructed to OFFER FOR SALE, at the Union Hotel, Newton Abbot, on Friday, the 11th day of August, 1876, at Three for Four o'clock in the afternoon, all those DESIRABLE FREEHOLD QUARRIES,

Bittaste adjoining the South Devon Rallway, at Wrigwell, or Wigwill, in the parish of Ipplepen, tog-ther with the comfortable and well-built DWELLING HOUSE and ARABLE FIELD adjoining, known as NARROW PARK, and containing altogether 1a. 2s. 12r., be the same more or less, and being the closes or portions of the closes numbered 388, 889, 890, and 594 in the Tithe Map for the said parish of Ipplepen.

the closes numbered 888, 889, 890, and 894 in the Tithe Map for the said parish of Ipplepen.

The property is in a most desirable situation, having a siding from the railway, by which large quantities of Devonshire marble have been sent, and it is still believed there is still a valuable vein which can be easily mined.

There is a great demand for the stone, which is used for building at Plymouth, Dawlish, Buckfastleigh, and intermediate places.

There is a large lime kiln and appliances for loading any quantity of marble, lime, or stone.

A purchaser not wishing to work the quarries, can be sure of obtaining a return of £4 per cent. on the amount of his purchase money.

Adjoining the property offered for sale are another 11 acres, having the same run of rock, and which can be procured.

A portion of the purchase money may, if required, remain on security of the property.

Application to view should be made to Mr. J. B. FARLEY, on the Premises; and further particulars may be obtained from the Auctioneers, at Newton Abbot and Totnes; or from Messrs. Hooper and Michelmore, Solicitors, Newton Abbot.

Dated July 21st, 1876.

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M. R. RYMILL is favoured with instructions from Messrs.

J. and A. Blyth to SELL, BY AUCTION, at Fore-street, Limehouse,
London, on Monday, September 11, and following days (owing to the freehold
premises and houses adjoining being required for other purposes, and having purchased the extensive works lately occupied by Messrs. Dudgeon, the VALUABLE
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at a valuation.

JAMES M'CALL, at the Mine, will show the underground workings, as also the plans and sections; and for further particulars application may be made to Assan Ander M'Cubbin, Solicitor, Ayr; or to Mr. Thos. Smith, Land Steward, Borbeth Ayr, June, 1876.

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The Mine has been thoroughly proved, and a steady output may, it is believed, be relied upon.

For conditions of sale, and further particulars, apply to Alan B. Salmon, Solicitor, Ulverston, and Barrow-in-Furness.

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TO BE SOLD, BY PRIVATE CONTRACT, by the Executrix of the late Gronge Prill, Esq., deceased, a FREEHOLD ESTATE, with the MACHINERY and MATERIALS now in use thereon, comprising the above Mine, together with the MINING LEASES of adjoining properties, as a going concern. It is telleved the lodes of the Mine are a continuation of the well-known Logylas. For plans and particulars apply to Walter Eddy, Esq., Llangollen; and to view, Capt. Ball, on the Mine.

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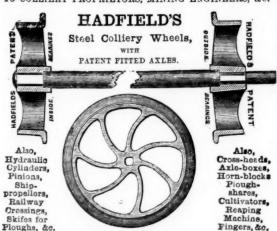
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